



**BIBLIOGRAPHIE SIGNALITIQUE  
SUR LES  
PRECIPITATIONS ACIDES**

**CENTRE SAINT-LAURENT**



**Environnement  
Canada**

**Conservation et  
Protection**

**Région du Québec**

**Environment  
Canada**

**Conservation and  
Protection**

**Quebec Region**

**BIBLIOGRAPHIE SIGNALITIQUE  
SUR LES  
PRECIPITATIONS ACIDES**

Jean-Yves Charette

**CENTRE SAINT-LAURENT  
DIRECTION DES EAUX INTERIEURES**

Février 1990

## AVANT-PROPOS

Cette bibliographie a été préparée afin de répondre à deux objectifs: mettre à la disposition du public et de la communauté scientifique autant d'information que possible sur le problème des précipitations acides et faciliter l'accès à la collection de documents dont dispose le bureau de la Direction des eaux intérieures du Centre Saint-Laurent sur le sujet.

Comme elle a d'abord été conçue pour satisfaire les besoins des scientifiques de la Direction des eaux intérieures, la présente publication n'a pas la prétention d'être exhaustive. Nous tentons cependant de repérer et d'y intégrer autant de références que possible. Afin d'informer le public et la communauté scientifique des documents dont nous disposons, nous publions régulièrement une version révisée de cette bibliographie.

Notre répertoire de documents est à la disposition du public. Cependant, dans le but de garantir la disponibilité de ces documents, seule la consultation sur place est autorisée.

Pour plus de renseignements,  
s'adresser à:

Jean-Yves Charette  
(418) 648-3921

## FOREWORD

This bibliography has been prepared with two purposes in mind: first, to make as much information as possible available on the subject of acid precipitation available to the general public and to the scientific community; secondly, to provide easy accessibility to the collection of documents available in the Office of the Inland Waters Branch of the Saint-Lawrence Center.

Originally designed to fulfill the needs of our scientists, this bibliography is by no means exhaustive. However, we have attempted to integrate to it as many documents as possible. To inform the general public and the scientific community of the contents of the collection, we publish regularly a revised version of this bibliography.

Our collection is open to the public. However, in order to guarantee the availability of the documents, only consultation on the premises is authorized.

For further information,  
please contact:

Jean-Yves Charette  
(418) 648-3921

## TABLE DES MATIERES

	<u>Page</u>
CHAPITRE 1: ENVIRONNEMENT ATMOSPHERIQUE . . . . .	1
1. 1 Ouvrages de synthèse . . . . .	1
1. 2 Emissions . . . . .	4
1. 3 Transport . . . . .	15
1. 4 Transformations . . . . .	24
1. 5 Précipitations et dépôts . . . . .	30
1. 6 Méthodes et techniques . . . . .	77
CHAPITRE 2: ORGANISMES AQUATIQUES . . . . .	91
2. 1 Ouvrages de synthèse . . . . .	91
2. 2 Microorganismes . . . . .	94
2. 3 Phytoplancton . . . . .	98
2. 4 Macrophytes . . . . .	105
2. 5 Zooplancton . . . . .	107
2. 6 Invertébrés . . . . .	112
2. 7 Poissons . . . . .	117
2. 8 Amphibiens . . . . .	139
2. 9 Oiseaux . . . . .	140
2.10 Méthodes et techniques . . . . .	141
CHAPITRE 3: HYDROGEOCHIMIE . . . . .	143
3. 1 Ouvrages de synthèse . . . . .	143
3. 2 Qualité de l'eau . . . . .	144
3. 3 Bassins jaugés . . . . .	196
3. 4 Sédiments . . . . .	206
3. 5 Capacité tampon et sensibilité du milieu . . . . .	212
3. 6 Sols et géologie . . . . .	219
3. 7 Méthodes et techniques . . . . .	238
CHAPITRE 4: VEGETATION TERRESTRE . . . . .	253
CHAPITRE 5: FAUNE TERRESTRE . . . . .	271
CHAPITRE 6: GENERALITES . . . . .	273
6.1 Ouvrages de vulgarisation . . . . .	273
6.2 Ouvrages de synthèse . . . . .	279
6.3 Aspects politiques et législatifs . . . . .	294
6.4 Aspects socio-économiques . . . . .	300
6.5 Bibliographies . . . . .	309
6.6 Programmes d'activité . . . . .	311
CHAPITRE 7: LACS EXPERIMENTAUX . . . . .	315



## CHAPITRE I: ENVIRONNEMENT ATMOSPHERIQUE

### 1. 1 Ouvrages de synthèse

#### Cote

- 585 BARRIE, L.A, 1981. Environment Canada's long range transport of atmospheric pollutants program: atmospheric studies. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 26 p.
- 217 BROSSET, C., K. ANDREASSON, M. FERM, 1975. The Nature and Possible Origin of Acid Particles Observed at the Swedish West Coast. Atmospheric Environment 9: p. 631 - 642.
- 1203 CANADA. ENVIRONNEMENT CANADA, 1984. Emissions de véhicules légers et la question des oxydants au Canada. Rapport SPE 2/TS/3, Environnement Canada, Service de la protection de l'environnement. 16 p.
- 95 DOCHINGER, L.S., J.G. CALVERT, 1977. Air pollution sources: General effects and trends. Proc. of the 32nd annual meeting, Soil Conservation Society of America, Aug. 7 - 10, 1977. Richmond. Virginia. p. 187 - 193.
- 153 DOVLAND, H., E. JORANGER, A. SEMB, 1976. Deposition of air pollutants in Norway. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F. (ed.). Research Report 6/76. p. 15 - 35.
- 285 ELIASSEN, A., 1980. A Review of Long - Range Transport Modeling. Journal of Applied Meteorology 19 (3): p. 231 - 240.
- 763 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 764 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3B, 1982. Evaluation des techniques, coûts et émissions. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 446 p.

(section 1. 1)

- 211 FORLAND, E.J., 1973. A Study of the Acidity in the Precipitation in Southwestern Norway. Tellus 25: p. 291 - 299.
- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 209 GORHAM, E., 1961. Factors Influencing Supply of Major Ions to Inland Waters, with Special Reference to the Atmosphere. Geological Society of America Bulletin 72: p. 795 - 840.
- 20 INRS-EAU, 1980. Exposé traitant des émissions de soufre et de l'acidité des précipitations. 19 p.
- 32 LACHANCE, M., B. BOBEE, 1978. Etude de la variabilité du pH des précipitations autour de Rouyn - Noranda. INRS-Eau, Rapport soumis au Bureau d'études des substances toxiques (BCST) des Services de protection de l'environnement du Québec 95: 74 p.
- 353 McBEAN, G.A., 1979. Acid Rain: Emissions, Atmospheric Transport, Transformation and Depositions. Environment Canada, Atmospheric Environment Service: 12 p.
- 324 MUNN, R.E., 1976. Atmospheric Transport and Diffusion on the Regional Scale. Proc. First Specialty Symposium on Atmospheric Contribution to the chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975 p. 1 - 20.
- 218 NORDO, J., A. ELAISSEN, J. SALTBONES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150
- 328 OTTAR, B., 1976. Organization of Long Range Air Pollution Monitoring in Europe. Proc. First Specialty Symposium on Atmospheric Contribution to the chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 56 - 64.
- 385 PAULIN, G., 1980. Détermination préliminaire des régions du Québec particulièrement touchées par les précipitations acides. Ministère des Richesses naturelles, Feuillelet météorologique 19(8): p. 125 - 141.

(section 1. 1)

- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.
- 321 SASSEVILLE, J. - L., M. LACHANCE, 1980. La qualité des eaux atmosphériques. Eau du Québec 14(1): p. 27 - 34.
- 1535 SCHULTZ, J.M., 1985. Acid precipitation in southwestern Ohio, USA. Ohio J. Sci. 85(2): p. 58.
- 1201 SHAW, R.W., 1984. Le transport des oxydes d'azote dans l'atmosphère. Rapport SPE 2/TS/2, Environnement Canada, Service de la protection de l'environnement. 11 p.
- 193 SLINN, W.G.N., 1977. Some Approximations for the Wet and Dry Removal of Particles and Gases from the Atmosphere. Water, Air and Soil Pollution 7: p. 513 - 543.
- 1545 STUMM, W., K.J. IRGOLIC, A.E. MARTELL, 1985. Deposition of atmospheric and metal pollutants and their impact on freshwater environment; case studies in Switzerland. United-States - Italy Joint Seminar Workshop, 1983. Environ. Inorg. Chem. p. 401 - 417.
- 696 SWEDEN. SWEDISH MINISTRY OF AGRICULTURE, 1982. Acidification today and tomorrow. Study prepared for the 1982 Stockholm Conference. 231 p.
- 62 VERMEULEN, A.J., 1978. Acid Precipitation in the Netherlands. Environmental Science & Technology. 12 (9): p. 1017 - 1021.
- 41 WILTSHIRE, J.F., 1979. The Long Range Transport of Atmospheric Acids; A Sulphur Budget for Nova Scotia. Service de la protection de l'environnement, Environnement Canada, Surveillance Report EPS-5-AR-79-8: 114 p.

## 1. 2 Emissions

- 1427 BADIN, E.J., G.C. FRAZIER, 1985. Sorbents for fluidized - bed combustion. Environmental Science and Technology 19(10): p. 894 - 901
- 1396 BARRIE, L.A., J.M. HALES, 1984. The spatial distributions of precipitation acidity and major ion wet deposition in north america during 1980. Tellus Ser. B Chem. Phys. Meteorol. 36(5): p. 333 - 355.
- 1285 BARRIE, L.A., K. ANLAUF, H.A. WIEBE, P. FELLIN, 1983. Acidic pollutants in air and precipitation at selected rural locations in Canada. Proc. Amer. Chem. Soc. Symp. on Acid Rain, March 1982, Las Vegas, Nev., J.I. Teasly (ed.), Ann Arbor Science. p 15 - 35.
- 259 BEAMISH, R.J., 1974. Loss of Fish Populations from Unexploited Remote Lakes in Ontario, Canada as a Consequence of Atmospheric Fallout of Acid. Water Research 8: p. 85 - 95.
- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 595 BEAMISH, R.J., H.H. HARVEY, 1972. Acidification of the La Cloche Mountain Lakes, Ontario, and Resulting Fish Mortalities. Journal Fisheries Research Board of Canada 29(8): p. 1131 - 1143.
- 217 BROSSET, C., K. ANDREASSON, M. FERM, 1975. The Nature and Possible Origin of Acid Particles Observed at the Swedish West Coast. Atmospheric Environment 9: p. 631 - 642.
- 102 BROWN, D.J.A., K. SADLER, 1981. The chemistry and fishery status of acid lakes in Norway and their relationship to european sulphur emissions. Journal of Applied Ecology 18: p. 433 - 441.
- 1200 CANADA. ENVIRONNEMENT CANADA, 1984. Limitation des émissions atmosphériques polluantes: Véhicules légers. Rapport SPE 2/TS/4, Service de la protection de l'environnement. 42 p.

(section 1. 2)

- 1203 CANADA. ENVIRONNEMENT CANADA, 1984. Emissions de véhicules légers et la question des oxydants au Canada. Rapport SPE 2/TS/3, Environnement Canada, Service de la protection de l'environnement. 16 p.
- 204 CANADA. ENVIRONNEMENT CANADA, 1980. Lignes directrices s'appliquant à l'indice de la qualité de l'air à court terme. Rapport du Comité fédéral - provincial de la pollution de l'air. 15 p.
- 838 CHAN, W.H., C.U. RO, M.A. LUSIS, R.J. VET, 1982. Impact of the Inco nickel smelter emissions on precipitation quality in the Sudbury area. Atmospheric Environment 16(4): p. 801 - 814.
- 1355 CHAN, W.H., M.A. LUSIS, 1985. Post-superstack Sudbury smelter emissions and their fate in the atmosphere; an overview of the Sudbury environment study results. Water Air Soil Pollut. 26(1): p. 43 - 58.
- 566 CHOQUETTE, P.J., 1980. Précipitations acides: Tendances et extrapolations des émissions des polluants précurseurs au Canada et aux Etats - Unis. Résumé détaillé. Direction générale de l'assainissement de l'air, Environnement Canada, Ottawa. 23 p. (version anglaise disponible)
- 567 CHOQUETTE, P.J., 1980. Historical, Current, and Projected Emissions of Acid Rain Precursors in Eastern North America. An Overview. In: Acid Rain Panel Discussion. First Global Conference on the Future, Toronto, 21 July 1980. Air Pollution Control Directorate, Environment Canada. 10 p.
- 568 CHOQUETTE, P.J., F. VENA, 1981. Emissions - Sources of Concern. An Overview. In: Acid deposition, knows and unknowns - The canadian perspective. Québec - Ontario APCA Conference. Montréal, Québec, April 7 - 8, 1981. Air Pollution Control Directorate, Environment Canada. 16 p.
- 468 COGBILL, C.V., G.E. LICKENS, 1974. Acid Precipitation in the North-eastern United States. Water Resources Research, 10(6): p. 1134 - 1137.
- 120 COWLING, E.B., L.S. DOCHINGER, 1979. Effects of Acid Rain on Crops and Trees. American Society for Civil Engineers. ASCE preprint, NO. 3598: p. 21 - 54.

(section 1. 2)

- 425 DILLON, P.J., N.D. YAN. W.A. SCHEIDER, N. CONROY, 1977. Acidic Lakes in Ontario: Characterization, Extent, and Responses to Base and Nutrient Additions. Ontario Ministry of the Environment. 39 p.
- 660 DURRAN, D.R., M.J. MELDGIN, M. LIU, 1979. A study of long range air pollution problems related to coal development in the northern great plains. Atmospheric Environment 13: p. 1021 - 1037.
- 822 ESTLANDER, A., 1982. Air emissions of importance to the acidifying effect. Luonnon Tutkija, 86(1): p. 23 - 26. (En finnois avec résumé en anglais).
- 763 ETATS - UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 503 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3B. 1981. Evaluation des techniques, coûts et émissions. Rapport provisoire Etats-Unis - Canada, Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière, 189 p. (version anglaise disponible)
- 142 FICKE, J.F., 1977. Air pollution: Impact on Water. Proc. of the 32nd annual meeting, Soil Conservation Society of America. Aug. 7 - 10, 1977. p. 208 - 211.
- 481 FLEMING, R.A., 1979. Acid Precipitation: An Emission Perspective. CTS-07165-1, Environmental Protection Department, Central Thermal Services: 8 p.
- 211 FORLAND, E.J., 1973. A Study of the Acidity in the Precipitation in Southwestern Norway. Tellus 25: p. 291 - 299.
- 1295 GALLOWAY, J.N., G.E. LIKENS, M.E. HAWLEY, 1984. Acid precipitation: natural versus anthropogenic components. Science 226(4676): p. 829 - 831.
- 299 GETHER, J., G. LUNDE, J. MARKALI, 1976. Particulate material in atmospheric fallout and precipitation over the south of Norway. SNSF - Project, Rapport 7/76, Oslo: 15 p.

(section 1. 2)

- 1460 GIBIAN, G.P., 1985. Predicting deposition reductions using long-range transport models; some policy implications. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 137 - 172.
- 1286 GOKLANY, I.M., G.F. HOFFNAGLE, 1984. Trends in emissions of PM, SOx and NOx, VOC: NOx ratios and their implications for trends in pH near industrialized areas. J. Air Pollut. Control Assoc. 34(8): p. 844 - 846.
- 1048 GOLOMB, D., 1983. Acid deposition - precursor emission relationship in the northeastern U.S.A.: The effectiveness of regional emission reduction. Atmospheric Environment 17(7): p. 1387 - 1390.
- 404 GORHAM, E., 1967. Some Chemical Aspects of Wetland Ecology. Nat. Res. Council Canada, Assoc. Comm. on Geotech. Res., Tech. Memo no 90: p. 20 - 38.
- 594 GORHAM, E., 1976. Acid Precipitation and its Influence Upon Aquatic Ecosystems - An Overview. Water, Air, and Soil Pollution 6: p. 457 - 481.
- 177 GORHAM, E., A.G. GORDON, 1963. Some Effects of Smelter Pollution upon Aquatic Vegetation near Sudbury, Ontario. Canadian Journal of Botany 41: p. 371 - 378.
- 799 GREENHILL, N.B., K.H. FUNG, K.I. PEVERILL, G.P. BRINER, 1982. Sulphur content of rainwater in Victoria, Australia. Search, 13(5 - 6): p. 153 - 155.
- 463 HESSLEIN, R.H., 1979. Lake Acidification Potential in the Alberta Oil Sands Environmental Research Program Study Area. Alberta Oil Sands Environmental Research Program, 26 p.
- 793 HILEMAN, B., 1983. Acid fog. Environment Science and Technology, 17(3): p. 117A - 120A.
- 814 HOLT, B.D., R. KUMAR, P. T. CUNNINGHAM, 1982. Primary sulfates in atmospheric sulfates: Estimation by oxygen isotope ratio measurements. Science, 217: p. 51 - 53.

(section 1. 2)

- 996 HOV, O., 1983. Model calculations of the effect of SO<sub>2</sub>, NO<sub>x</sub> or HC emission changes on regional scale sulphate and nitrate production. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 204 - 217.
- 580 HUTCHINSON, T.C., 1981. The ecological consequences of acid discharges from industrial smelters. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 13 p.
- 831 HUTTUNEN, S., 1982. Dispersion and effects of airborne sulfur compounds on forest environments in the Uusimaa district (Finland). Luonnon Tutkija, 86(1): p. 39 - 42. (En finnois avec résumé en anglais).
- 355 INCO LIMITED, 1980. The Containment of Sulphur Dioxide Emissions at Inco's Sudbury Operations. 9 p.
- 20 INRS - EAU, 1980. Exposé traitant des émissions de soufre et de l'acidité des précipitations. 19 p.
- 229 INTERAGENCY ENERGY / ENVIRONMENT RESEARCH AND DEVELOPMENT PROGRAM, 1979. Sulfur Oxides Control in Japan. EPA-600/9-79-043. 24 p.
- 287 IVERACH, D., 1978. A Technique for Estimating the Relative Impact of Mobile and Stationary Sources on NO<sub>2</sub> Concentrations. Journal of the Air Pollution Control Association 28 (8): p. 800 - 802.
- 1296 JACOB, D.J., J.M. WALDMAN, J.W. MUNGER, M.R. HOFFMANN, 1985. Chemical composition of fogwater collected along the California coast, USA. Environ. Sci. Technol. 19(8): p. 730 - 736.
- 1391 JARVINEN, O., A. PATILA, J. KAMARI, 1985. Temporal development of acid deposition at four observation stations in Finland in 1971-1982. Aqua Fenn. 15(1): p. 3 - 10.
- 551 JEFFRIES, D.S., W.R. SNYDER, 1981. Atmospheric Deposition of Heavy Metals in Central Ontario. Water, Air and Soil Pollution 15: p. 127 - 152.

(section 1. 2)

- 769 JERVIS, R.E., K.L. RICHARD HO, B. TIEFENBACH, 1982. Trace impurities in Canadian oil - sands, coals and petroleum products and their fate during extraction, up - grading and combustion. Journal of Radioanalytical Chemistry, 71(1 - 2): p. 225 - 241.
- 792 JICKELLS, T., A. KNAP, T. CHURCH, J. GALLOWAY, J. MILLER, 1982. Acid rain on Bermuda. Nature, 297(5861): p. 55 - 57.
- 832 KELLOGG, W.W., R.D. CADLE, E.R. ALLEN, A.L. LAZRUS, E.A. MARTELL, 1972. The sulfur cycle. Science, 175(4022): p. 587 - 596.
- 1367 KHEMANI, L.T., G.A. MOMIN, M.S. NAIK, P.S.P. RAO, R. KUMAR, B. MURTY, 1985. Impact of alkaline particulates on pH of rain water in India. Water Air Soil Pollut. 25(4): p. 365 - 376.
- 418 LACHANCE, M., B. BOBEE, 1980. Impact des sources de SO<sub>2</sub> sur l'acidification des précipitations et étude régionale de l'influence des émissions de la fonderie de Noranda. Water Pollution Research Journal of Canada 15(3): p. 271-287.
- 32 LACHANCE, M., B. BOBEE, 1978. Etude de la variabilité du pH des précipitations autour de Rouyn - Noranda. INRS - Eau, Rapport soumis au Bureau d'études des substances toxiques (BCST) des Services de protection de l'environnement du Québec 95: 74 p.
- 87 LEDBETTER, J.O., 1972. Variation of Pollutant Concentration with Sampling Time. Environmental Letters 3 (3): p. 159 - 169.
- 911 LEWIS Jr., W.M., F.H. WEIBEZAHN, 1981. Acid rain and major seasonal variation of hydrogen ion loading in a tropical watershed. Acta Cienta Venezolana 32: p. 236 - 238.
- 1492 LURIA, M., C.C. VAN VALIN, D.L. WELLMAN, R.F. PUESCHEL, 1986. Contribution of Gulf area natural sulfur to the North American sulfur budget. Environ. Sci. Technol. 20(1): p. 91 - 95.
- 118 MADSEN, B.C., 1981. Acid Rain at Kennedy Space Center, Florida: Recent Observations. Atmospheric Environment 15(5): p. 853 - 862.

(section 1. 2)

- 1405 MASTERS, J.M., R.A. JR GORSE, S.M. JAPAR, J.M. NORBECK, 1986. A characterization of the Detroit, Michigan, USA, wintertime aerosol. Water, Air, and Soil Pollution 27(3-4): p. 277 - 286.
- 772 McCOLL, J.G., L.K. MONETTE, D.S. BUSH, 1982. Chemical characteristics of wet and dry atmospheric fallout in northern California. Journal of Environmental Quality, 11(4): p. 585 - 590.
- 600 MOSS, M.R., 1975. Spatial Patterns of Precipitation Reaction. Environ. Pollution 8: p. 301 - 315.
- 282 MUNN, R.E., H. RODHE, 1971. On the meteorological interpretation of the chemical composition of monthly precipitation samples. Tellus 23 (1): p. 1 - 13.
- 774 NEUMANN - HAUF, G., G. HALBRITTER, 1982. Site and season specific variations of the atmospheric pollutant transport and deposition on the local and regional scale. The Science of the Total Environment, 23: p. 91 - 96.
- 593 NISBET, I.C.T., 1975. Sulfates and Acidity in precipitation: Their Relationship to Emissions and Regional Transport of Sulfur Oxides. In: Air Quality and Stationary source emission control, ch. 7. Committee on Public Works, U.S. Senate Serv. No. 94 - 4: p. 276 - 312.
- 510 NORDO, J., 1976. Long Range Transport of Air Pollutants in Europe and Acid Precipitation in Norway. In: Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 87 - 103.
- 218 NORDO, J., A. ELAISSEN, J. SALT BONES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150
- 197 NYBORG, M., J. CREPIN, D. HOCKING, J. BAKER, 1977. Effect of Sulphur Dioxide on Precipitation and on the Sulphur Content and Acidity of Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 439 - 448.
- 592 ODEN, S., 1976. The acidity Problem - An Outline of Concepts. Water, Air, and Soil Pollution 6: p. 137 - 166.
- 475 OGDEN, J.G., 1980. Water Chemistry Changes in Halifax County, Nova Scotia Lakes. Department of Biology, Dalhousie University. Draft: 32 p.

(section 1. 2)

- 24 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. An Analysis of the Sudbury Environmental Study Network Precipitation Acidity Data June - September, 1978. 146 p.
- 25 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. Acid Particulate and Particle Sizing Sampling at INCO Superstack, June 1977. Rapport no ARB-TDA53-78: 87 p.
- 26 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. Air Quality Assessment Studies in the Sudbury Area, Volume 1, Ambient Air Quality, 1976 - 1977. 104 p.
- 1510 OPPENHEIMER, M., 1985. An analysis of the sulfur budget and interstate sulfur transport for Colorado, USA. Atmos. Environ. 19(9): p. 1439 - 1444.
- 1511 OPPENHEIMER, M., C.B. EPSTEIN, R.E. YUHNKE, 1985. Acid deposition smelter emissions and linearity issue in the western USA. Science (Wash. D.C.) 229(4716): p. 859 - 862.
- 1585 OUELLET, M., 1987. Reduction of airborne fluoride emissions from canadian aluminium smelters as revealed by snow chemistry. The Science of the Total Environment. Elsevier Science Publishers, Amsterdam, Netherlands. 66: p. 65 - 72.
- 1515 PATRINOS, A.A.N., 1985. The impact of urban and industrial emissions on mesoscale precipitation quality. J. Air Pollut. Control Assoc. 35(7): p. 719 - 727.
- 936 PELLETT, G.L., D.I. SEBACHER, R.J. BENDURA, D.E. WORNOM, 1983. HCL in rocket exhaust clouds: atmospheric dispersion, acid aerosol characteristics, and acid rain deposition. Journal of the Air Pollution Control Association 33(4): p. 304 - 311.
- 7 PERSSON, G.A., 1976. Control of Sulfur Dioxide Emissions in Europe. Ambio 5 (5 - 6): p. 249 - 252.
- 779 POLAK, J.C., 1982. Motor vehicle NOx - The canadian situation. In: Schneider, T. et L. Grant (Eds). Air Pollution by Nitrogen Oxides, Amsterdam: Elsevier Scientific Publishing, p. 915 - 919.
- 1247 PRATT, G.C., 1984. Source areas for chemical components in Minnesota rain. Water, Air and Soil Pollution 23(3): p. 339 - 348.

(section 1. 2)

- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.
- 1525 REGENS, J.L., R.W. RYCROFT, 1985. Perspective on acid deposition control; science, economics and policy-making. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 87 - 106.
- 689 ROBINSON, J.W., H. GHANE, 1982. Occurrence of acid rain in Baton Rouge, Louisiana, Summer 1981. The role of the catalytic converter. J. Environ. Sci. Health A17(1): p. 129 - 136.
- 541 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1980. Bulk Deposition in the Sudbury and Muskoka - Haliburton Areas of Ontario during the Shutdown of Inco ltd in Sudbury. Ontario Ministry of the Environment, Limnology and Toxicity Section, Rexdale, Ontario. 18 p.
- 1536 SEIGNEUR, C., P. SAXENA, V.A. MIRABELLA, 1985. Diffusion and reaction of pollutants in stratus clouds; application to nocturnal acid formation in plumes. Environ. Sci. Technol. 19(9): p. 821 - 828.
- 291 SEMB, A., 1978. Deposition of trace elements from the atmosphere in Norway. SNSF - Project, Rapport FR - 13/78, Oslo: 28 p.
- 1003 SLANINA, J., F.G. ROMER, W.A.H. ASMAN, 1983. Investigation of the source regions for acid deposition in the Netherlands. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 129 - 141.
- 376 STENSLAND, G.J., 1980. Precipitation Chemistry Trends in the North-eastern United States. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23 1979: p. 87 - 108.
- 1545 STUMM, W., K.J. IRGOLIC, A.E. MARTELL, 1985. Deposition of atmospheric and metal pollutants and their impact on freshwater environment; case studies in Switzerland. United States - Italy Joint Seminar Workshop, 1983. Environ. Inorg. Chem. p. 401 - 417.

(section 1. 2)

- 842 SUMMERS, P.W., 1983. Sources, transport atmosphérique et dépôt acide: une perspective mondiale. Bulletin de la Qualité des Eaux VIII(2): p. 81 - 88.
- 601 SUMMERS, P.W., D.W. WHELPDALE, 1976. Acid Precipitation in Canada. Water, Air and Soil Pollution 6: p. 447 - 455.
- 392 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1979. Sulfur Emission: Control technology and waste management. EPA-600/9-79-019: 32 p.
- 381 VAN LOON, J.C., R.J. BEAMISH, 1977. Heavy - Metal Contamination by Atmospheric Fallout of Several Flin Flon Area Lakes and the Relation to Fish Populations. J. Fish. Res. Board Can., 34(7): p. 899 - 906.
- 378 VERMEULEN, A.J., 1980. The Acidic precipitation phenomenon. A Study of this phenomenon and of a relationship between the acid content of precipitation and the emission of sulfur dioxide and nitrogen oxides in the Netherlands. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23 1979. p. 7 - 60.
- 1383 VONG, R.J., T.V. LARSON, D.S. COVERT, A.P. WAGGONER, 1985. Measurement and modeling of western Washington USA precipitation chemistry. Water Air Soil Pollut. 26(1): p. 71 - 84.
- 1554 WEBBER, D.J., 1985. Equitability reducing transboundary causes of acid rain; an economic incentive regulatory approach. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 219 - 238.
- 1385 WHARFE, A.J., P.A. JAMES, 1985. Atmospheric sulfur dioxide and rainwater at a coastal locality in N.W. England, UK. Water Air Soil Pollut. 25(3): p. 237 - 242.
- 362 WHELPDALE, D.M., A.W. MACAFEE, 1979. Un bilan du soufre contenu dans l'atmosphère de l'Est canadien. Conférence sur les contaminants dans l'environnement, Québec, 14 - 15 mai. 22 p.
- 745 WILLIAMS, D.J., J.N. CARRAS, J.W. MILNE, 1981. The oxidation and long - range transport of sulphur dioxide in a remote region. Atmospheric Environment 15(10 - 11): p. 2255 - 2262.

(section 1. 2)

- 41 WILTSHIRE, J.F., 1979. The Long Range Transport of Atmospheric Acids; A Sulphur Budget for Nova Scotia. Service de la protection de l'environnement, Environnement Canada, Surveillance Report EPS-5-AR-79-8: 114 p.
- 802 WOLT, J.D., D.A. LIETZKE, 1982. The influence of anthropogenic sulfur inputs upon soil properties in the Copper Basin, region of Tennessee. Journal of the American Soil Science Society, 46: p. 651 - 656.
- 1559 YOUNG, J.W.S., R.W. SHAW, 1986. A proposed strategy for reducing sulfate deposition in North America I. Methodology for minimizing sulfur removal. Atmos. Environ. 20(1): p. 189 - 200.
- 818 ZAJAC, P.K., K. GRODZINSKA, 1982. Snow contamination by heavy metals and sulphur in Cracow agglomeration (southern Poland). Water Air and Soil Pollution, 17(3): p. 269 - 280.

### 1. 3 Transport

- 713 AGNEW, T.A., E. WILSON, L.A. BARRIE, J.D. REID, D. FAULKNER, 1982. Estimation of long term acidic deposition over snow and snowmelt shock potential. In: Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées, Fredericton, 14 - 15 juin 1982, p. 597 - 614.
- 198 BAKER, J., D. HOCKING, M. NYBORG, 1977. Acidity of Open and Intercepted Precipitation in Forests and Effects on Forest Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 449 - 460.
- 1285 BARRIE, L.A., K. ANLAUF, H.A. WIEBE, P.FELLIN, 1983. Acidic pollutants in air and precipitation at selected rural locations in Canada. Proc. Amer. Chem. Soc. Symp. on Acid Rain, March 1982, Las Vegas, Nev., J.I. Teasly (ed.), Ann Arbor Science. p. 15 - 35.
- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 534 BEAMISH, R.J., G.A. MCFARLANE, J.C. VAN LOON, J. LICHWA, 1975. An Examination of the possible effects of Sudbury nickel mining and smelting operations on fishes and the water chemistry of lakes within the whitefish lake indian reserve. Environnement Canada, Service des Pêches et des Sciences de la mer. Rapport technique no 579. 52 p.
- 1430 BILONICK, R.A., 1985. The space-time distribution of sulfate deposition in the northeastern USA. Atmospheric Environment 19(11): p. 1829 - 1846.
- 1419 BLOXAM, R.M., J.W. HORNBECK, C.W. MARTIN, 1984. The influence of storm characteristics on sulfate in precipitation. Water Air Soil Pollut. 23(4): p. 359 - 374.
- 1165 BRIDGMAN, H.A., 1984. Mesoscale spatial variability of sulfate in air and rainwater at St. Louis. Water, Air, and Soil Pollution 22(2): p. 153 - 172.
- 217 BROSSET, C., K. ANDREASSON, M. FERM, 1975. The Nature and Possible Origin of Acid Particles Observed at the Swedish West Coast. Atmospheric Environment 9: p. 631 - 642.

(section 1. 3)

- 1441 CARMICHAEL, G.R., L.K. PETERS, T. KITADA, 1986. A second generation model for regional-scale transport-chemistry deposition. Atmospheric Environment 20(1): p. 173 - 188.
- 1314 CASTELL, C.H., I. NOVACZEK, J.D. CASTELL, 1984. A study of the acidity of three Dartmouth, Nova Scotia lakes 1: The pH of precipitation falling on Micmac lake. Can. Tech. Rep. Fish. Aquat. Sci. 1231. 31p.
- 1355 CHAN, W.H., M.A. LUSIS, 1985. Post-superstack Sudbury smelter emissions and their fate in the atmosphere; an overview of the Sudbury environment study results. Water Air Soil Pollut. 26(1): p. 43 - 58.
- 566 CHOQUETTE, P.J., 1980. Précipitations acides: Tendances et extrapolations des émissions des polluants précurseurs au Canada et aux Etats - Unis. Résumé détaillé. Direction générale de l'assainissement de l'air, Environnement Canada, Ottawa. 23 p. (version anglaise disponible)
- 567 CHOQUETTE, P.J., 1980. Historical, Current, and Projected Emissions of Acid Rain Precursors in Eastern North America. An Overview. In: First Global Conference on the Future. Acid Rain Panel Discussion, Toronto, 21 July 1980. Air Pollution Control Directorate, Environment Canada. 10 p.
- 280 CHUNG, Y.S., 1977. The Distribution of Atmospheric Sulphates in Canada and its Relationship to Long - Range Transport of Air Pollutants. Environnement atmosphérique, Downsview, Ontario. Rapport ARQT-1-77. 19 p.
- 219 CONROY, N., K. HAWLEY, W. KELLER, C. LAFRANCE, 1976. Influences of the Atmosphere on Lakes in the Sudbury Area. Journal of Great Lakes Research 2: p. 146 - 165.
- 1151 DASCH, J.M., S.H. CADLE, G.T. WOLFF, 1984. Summertime study of acid deposition in the Detroit area. Water, Air, and Soil Pollution 21(1 - 4): p. 51 - 70.
- 579 DE BARY, E., C. JUNGE, 1963. Distribution of Sulfur and Chlorine over Europe. Tellus 15(4): p. 370 - 381.
- 635 DESAUTELS, G., 1981. Trajectoire des parcelles d'air qui ont atteint le Québec en 1978. Environnement Canada, Service de l'environnement atmosphérique, région du Québec: 28 p.

(section 1. 3)

- 660 DURRAN, D.R., M.J. MELDGIN, M. LIU, 1979. A study of long range air pollution problems related to coal development in the northern great plains. Atmospheric Environment 13: p. 1021 - 1037.
- 439 ELGMORK, K., A. HAGEN, A. LANGELAND, 1973. Polluted snow in southern Norway during the winters 1968 - 1971. Environmental pollution, 4: p. 41 - 52.
- 763 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 502 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2. 1981. Modélisation de l'atmosphère. Rapport provisoire Etats-Unis - Canada, Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 170 p.
- 1458 FAY, J.A., D. COLOMB, S. KAMAR, 1985. Source apportionment of wet sulfate deposition in eastern North America. Atmospheric Environment 19(11): p. 1773 - 1782.
- 944 FEELEY, J.A., H.M. LILJESTRAND, 1983. Source contributions to acid precipitation in Texas. Atmospheric Environment 17(4): p. 807 - 814.
- 211 FORLAND, E.J., 1973. A Study of the Acidity in the Precipitation in Southwestern Norway. Tellus 25: p. 291 - 299.
- 261 FORLAND, E.J., Y.T. GJESSING, 1975. Snow Contamination from Washout/Rainout and Dry Deposition. Atmospheric Environment 9: p. 339 - 352.
- 1295 GALLOWAY, J.N., G.E. LIKENS, M.E. HAWLEY, 1984. Acid precipitation: natural versus anthropogenic components. Science 226(4676): p. 829 - 831.
- 1318 GALLOWAY, J.N., D.W. WHELPDALE, G.T. WOLFF, 1984. The flux of S and N eastward from North America. Atmospheric Environment 18(12): p. 2595 - 2607.
- 299 GETHER, J., G. LUNDE, J. MARKALI, 1976. Particulate material in atmospheric fallout and precipitation over the south of Norway. SNSF - Project, Rapport 7/76, Oslo: 15 p.

(section 1. 3)

- 1460 GIBIAN, G.P., 1985. Predicting deposition reductions using long-range transport models; some policy implications. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 137 - 172.
- 404 GORHAM, E., 1967. Some Chemical Aspects of Wetland Ecology. Nat. Res. Council Canada, Assoc. Comm. on Geotech. Res., Tech. Memo no 90: p. 20 - 38.
- 594 GORHAM, E., 1976. Acid Precipitation and its Influence Upon Aquatic Ecosystems - An Overview. Water, Air, and Soil Pollution 6: p. 457 - 481.
- 99 HECK, W.W., A.S. HEAGLE, E.B. COWLING, 1977. Air pollution: Impact on plants. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7 - 10, 1977. p. 193 - 203.
- 854 HENDERSON, R.G., K. WEINGARTNER, 1982. Trajectory analysis of map3S precipitation chemistry data at Ithaca, N.Y. Atmospheric Environment 16(7): p. 1657 - 1665.
- 117 HENNING, R., 1970. On the Residence time of Antropogenic sulfur in Atmosphere. Tellus 22(1): p. 137 - 139.
- 996 HOV, O., 1983. Model calculations of the effect of SO<sub>2</sub>, NO<sub>x</sub> or HC emission changes on regional scale sulphate and nitrate production. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland p. 204 - 217.
- 20 INRS-EAU. Exposé traitant des émissions de soufre et de l'acidité des précipitations. 19 p.
- 1296 JACOB, D.J., J.M. WALDMAN, J.W. MUNGER, M.R. HOFFMANN, 1985. Chemical composition of fogwater collected along the California coast, USA. Environ. Sci. Technol. 19(8): p. 730 - 736.
- 251 JACOBSON, J.S., L.I. HELLER, P. VAN LEUKEN, 1976. Acidic precipitation at a site within the northeastern conurbation. Water, Air and Soil Pollution 6 (2/3/4): p. 339 - 349.

(section 1. 3)

- 551 JEFFRIES, D.S., W.R. SNYDER, 1981. Atmospheric Deposition of Heavy Metals in Central Ontario. Water, Air and Soil Pollution 15: p. 127 - 152.
- 792 JICKELLS, T., A. KNAP, T. CHURCH, J. GALLOWAY, J. MILLER, 1982. Acid rain on Bermuda. Nature 297(5861): p. 55 - 57.
- 686 KELLY, T.J., D.H. STEDMAN, 1980. Effect of urban sources on acid precipitation in the Western United States. Science 210: p. 1043.
- 50 KURTZ, J., W. A. SCHEIDER, 1980. Acidic Precipitation in southcentral Ontario: Analysis of Source Regions Using Air Parcel Trajectories. Ontario, Ministry of the Environment. 20 p.
- 418 LACHANCE, M., B. BOBEE, 1980. Impact des sources de SO<sub>2</sub> sur l'acidification des précipitations et étude régionale de l'influence des émissions de la fonderie de Noranda. Water Pollution Research in Canada (accepté pour publication). 28 p.
- 1323 LIU, M.-K., R.E. MORRIS, J.P. KILLUS, 1984. Development of a regional oxidant model and application to the Northeastern United States. Atmospheric Environment 18(6): p. 1145 - 1161.
- 1152 MARTIN, A., 1984. Sulphate and nitrate related to acidity in rainwater. Water, Air, and Soil Pollution 21(1 - 4): p. 271 - 277.
- 1153 MONTAGNINI, F., H.S. NEUFELD, C. UHL, 1984. Heavy metal concentrations in some non - vascular plants in an amazonian rainforest. Water, Air, and Soil Pollution 21 (1 - 4): p. 317 - 321.
- 600 MOSS, M.R., 1975. Spatial Patterns of Precipitation Reaction. Environ. Pollution 8: p. 301 - 315.
- 1319 MUNN, R.E., G.E. LIKENS, B. WEISMAN, J.W. HORNBECK, C.W. MARTIN, F.H. BORMANN, 1984. A meteorological analysis of the precipitation chemistry event samples at Hubbard Brook (N.H.). Atmospheric Environment 18(12): p. 2775 - 2779.
- 1176 MURGATROYD, A.L., 1983. Spatial variations in precipitation chemistry over natal, South Africa. South African Journal of Science 79(10): p. 408 - 410.

(section 1. 3)

- 774 NEUMANN - HAUF, G., G. HALBRITTER, 1982. Site and season specific variations of the atmospheric pollutant transport and deposition on the local and regional scale. The Science of the Total Environment, 23: p. 91 - 96.
- 593 NISBET, I.C.T., 1975. Sulfates and Acidity in precipitation: Their Relationship to Emissions and Regional Transport of Sulfur Oxides. In: Air Quality and Stationary source emission control, ch. 7. Committee on Public Works, U.S. Senate Serv. No. 94 - 4: p. 276 - 312.
- 510 NORDO, J., 1976. Long Range Transport of Air Pollutants in Europe and Acid Precipitation in Norway. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 87 - 103.
- 218 NORDO, J., A. ELAISSEN, J. SALTBONES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150.
- 592 ODEN, S., 1976. The acidity Problem - An Outline of Concepts. Water, Air, and Soil Pollution 6: p. 137 - 166.
- 776 OPPENHEIMER, Michael, 1983. The relationship of sulfur emissions to sulfate in precipitation. Atmospheric Environment, 17(3): p. 451 - 460.
- 873 OUELLET, M., H.G. JONES, 1982. Evidence paléolimnologique de transport atmosphérique longue portée de polluants acidifiants et de métaux traces. Eau du Québec 15(4): p. 356 - 368.
- 1515 PATRINOS, A.A.N., 1985. The impact of urban and industrial emissions on mesoscale precipitation quality. J. Air Pollut. Control Assoc. 35(7): p. 719 - 727.
- 1247 PRATT, G.C., 1984. Source areas for chemical components in Minnesota rain. Water, Air and Soil Pollution 23(3): p. 339 - 348.
- 1166 PRATT, G.C., M.R. COSCIO, S.V. KRUPA, 1984. Regional rainfall chemistry in Minnesota and west central Wisconsin. Atmospheric Environment 18(1): p. 173 - 182.
- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.

(section 1. 3)

- 1527 RENNER, E., U. RATZLAFF, W. ROLLE, 1985. A lagrangian multi-level model of transport, transformation and deposition of atmospheric sulfur dioxide and sulfate. Atmos. Environ. 19(8): p. 1351 - 1360.
- 1536 SEIGNEUR, C., P. SAXENA, V.A. MIRAEELLA, 1985. Diffusion and reaction of pollutants in stratus clouds; application to nocturnal acid formation in plumes. Environ. Sci. Technol. 19(9): p. 821 - 828.
- 1201 SHAW, R.W., 1984. Le transport des oxydes d'azote dans l'atmosphère. Rapport SPE 2/TS/2, Environnement Canada, Service de la protection de l'environnement. 11 p.
- 489 SINGH, B., 1981. L'occurrence et la variation dans le temps de la pluie acide, Baie James, Nouveau - Québec. Feuillelet météorologique 20(1): p. 7 - 20.
- 1003 SLANINA, J., F.G. ROMER, W.A.H. ASMAN, 1983. Investigation of the source regions for acid deposition in the Netherlands. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 129 - 141.
- 931 SLANINA, J., J.H. BAARD, W.L. SIJP, W.A.H. ASMAN, 1983. Tracing the sources of the chemical composition of precipitation by cluster analysis. Water, Air, and Soil Pollution 20(1): p. 41 - 45.
- 376 STENSLAND, G.J., 1980. Precipitation Chemistry Trends in the North - eastern United States. In: Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23, 1979: p. 87 - 108.
- 1413 STREETS, D.G., B.M. LESHT, J.D. SHANNON, T.D. VESELKA, 1985. Climatological variability. Environ. Sci. Technol. 19(10): p. 887 - 893.
- 842 SUMMERS, P.W., 1983. Sources, transport atmosphérique et dépôt acide: une perspective mondiale. Bulletin de la Qualité des Eaux VIII(2): p. 81 - 88.
- 601 SUMMERS, P.W., D.W. WHELPDALE, 1976. Acid Precipitation in Canada. Water, Air and Soil Pollution 6: p. 447 - 455.
- 929 SZEPESI, D.J., 1983. Sensitivity analysis on parameters of atmospheric sulfur transmission. The Science of the Total Environment 26(2): p. 183 - 202.

(section 1. 3)

- 342 TALBOT, L., 1980. Observations récentes de la qualité des précipitations au Québec. Environnement - Québec, Bureau d'étude sur les substances toxiques: 87 p.
- 736 TROUTMAN, D.E., N.E. PETERS, 1982. Deposition and transport of heavy metals in three lake basins affected by acid precipitation in the Adirondack mountains, New York. In: Energy and Environmental Chemistry, Acid Rain, Volume two, L.H. Keith (ed), Ann Arbor Science, Michigan, p. 33 - 89.
- 381 VAN LOON, J.C., R.J. BEAMISH, 1977. Heavy - Metal Contamination by Atmospheric Fallout of Several Flin Flon Area Lakes and the Relation to Fish Populations. J. Fish. Res. Board Can., 34(7): p. 899 - 906.
- 284 WEISS, R.E., A.P. WAGGONER, R.J. CHARLSON, N.C. AHLQUIST, 1977. Sulfate Aerosol: Its Geographical Extent in the Midwestern and Southern United States. Science 195: p. 979 - 981.
- 1385 WHARFE, A.J., P.A. JAMES, 1985. Atmospheric sulfur dioxide and rainwater at a coastal locality in N.W. England, UK. Water Air Soil Pollut. 25(3): p. 237 - 242.
- 362 WHELPLEDALE, D.M., A.W. MACAFEE. 1979. Un bilan du soufre contenu dans l'atmosphère de l'Est canadien. Conférence sur les contaminants dans l'environnement, Québec, 14 - 15 mai. 22 p.
- 745 WILLIAMS, D.J., J.N. CARRAS, J.W. MILNE, 1981. The oxidation and long - range transport of sulphur dioxide in a remote region. Atmospheric Environment 15(10 - 11): p. 2255 - 2262.
- 41 WILTSHIRE, J.F., 1979. The Long Range Transport of Atmospheric Acids; A Sulphur Budget for Nova Scotia. Service de la protection de l'environnement, Environnement Canada, Surveillance Report EPS-5-AR-79-8: 114 p.
- 294 WRIGHT, R.F., H. DOVLAND, 1977. Regional surveys of the chemistry of the snowpack in Norway late Winter 1973, 1974, 1975 and 1976. SNSF - Project, Rapport FR 12/77, Oslo: 29 p.

(section 1. 3)

818 ZAJAC, P.K., K. GRODZINSKA, 1982. Snow contamination by heavy metals and sulphur in Cracow agglomeration (southern Poland). Water Air and Soil Pollution, 17(3): p. 269 - 280.

#### 1. 4 Transformations

- 899 ADEWUYI, Y.G., G.R. CARMICHAEL, 1982. A theoretical investigation of gaseous absorption by water droplets form SO<sub>2</sub> - HNO<sub>3</sub> - NH<sub>3</sub> - CO<sub>2</sub> - HCl mixtures. Atmospheric Environment 16(4): p. 719 - 729.
- 1419 BLOXAM, R.M., J.W. HORNBECK, C.W. MARTIN, 1984. The influence of storm characteristics on sulfate in precipitation. Water Air Soil Pollut. 23(4): p. 359 - 374.
- 671 BOLIN, B., L. GRANAT, 1973. Local fallout and long - distance transport of sulfur. Ambio 2: p. 87 - 90.
- 1110 CARMICHAEL, G.R., M. REDA, 1982. Non - Isothermal SO<sub>2</sub> absorption by water droplets - The effects of precipitation intensity, sulfate aerosol scavenging and aqueous S(IV) oxidation. Atmospheric Environment 16(12): p. 2905 - 2915.
- 319 CHANG, S.G., R. TOOSI, T. NOVAKOV, 1981. The importance of soot particles and nitrous acid in oxidizing SO<sub>2</sub> in atmospheric aqueous droplets. Atmospheric Environment 15(7): p. 1287 - 1292.
- 1251 COCKS, A.T., W.J. Mc ELROY, 1984. Modeling studies of the concurrent growth and neutralization of sulfuric acid aerosols under conditions in the human airways. Environmental Research 35(1): p. 79 - 96.
- 1008 COX, R.A., S.A. PENKETT, 1983. Formation of atmospheric acidity. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 56 - 81.
- 1150 DERRICK, M.R., J.L. MOYERS, K.A. YARBOROUGH, M. WARREN, 1984. Aerosol and precipitation chemistry relationships at Big Bend National Park. Water, Air, and Soil Pollution 21(1 - 4): p. 171 - 181.
- 126 DURHAM, J.L., J.H. OVERTON, JR, V.P. ANEJA, 1981. Influence of Gaseous Nitric Acid on Sulfate Production and Acidity in Rain. Atmospheric Environment 15(6): p. 1059 - 1068.

(section 1. 4)

- 1252 EATOUGH, D.J., R.J. ARTHUR, N.L. EATOUGH, ET AL., 1984. Rapid conversion of SO<sub>2</sub> (g) to sulfate in a fog bank. Environ. Sci. Technol. 18(11): p. 855 - 859.
- 763 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 1458 FAY, J.A., D. COLOMB, S. KAMAR, 1985. Source apportionment of wet sulfate deposition in eastern North America. Atmospheric Environment 19(11): p. 1773 - 1782.
- 1030 FERREK, R.J., A.L. LAZRUS, J.W. WINCHESTER, 1983. Electron microscopy of acidic aerosols collected over the Northeastern United States. Atmospheric Environment 17(8): p. 1545 - 1561.
- 1019 GOLOMB, D., S. BATTERMAN, J. GRUHL, W. LABYS, 1983. Sensitivity analysis of the kinetics of acid rain models. Atmospheric Environment 17(3): p. 645 - 653.
- 594 GORHAM, E., 1976. Acid Precipitation and its Influence Upon Aquatic Ecosystems - An Overview. Water, Air, and Soil Pollution 6: p. 457 - 481.
- 1157 GROSJEAN, D., 1983. Chemical ionization mass spectra of 2, 4 dinitrophenylhydrazones of carbonyl and hydroxy-carbonyl atmospheric pollutants. Analytical Chemistry 55(14): p. 2436 - 2439.
- 804 HARRISON, H., T. V. LARSON, C. S. MONKMAN, 1982. Aqueous phase oxidation of sulfites by ozone in the presence of iron and manganese. Atmospheric Environment, 16(5): p. 1039 - 1041.
- 276 HENDRY, C.D., P.L. BREZONIK, 1980. Chemistry of Precipitation at Gainesville, Florida. Environmental Science and Technology 14 (7): p. 843 - 849.
- 793 HILEMAN, B., 1983. Acid fog. Environment Science and Technology, 17(3): p. 117A - 120A.
- 1292 HOLDREN, M.W., C.W. SPICER, J.M. HALES, 1984. Peroxyacetyl nitrate solubility and decomposition rate in acidic water. Atmospheric Environment 18(6): p. 1171 - 1173.

(section 1. 4)

- 996 HOV, O., 1983. Model calculations of the effect of SO<sub>2</sub>, NO<sub>x</sub> or Hc emission changes on regional scale sulphate and nitrate production. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 204 - 217.
- 1167 IBUSUKI, T., H.M. BARNES, 1984. Manganese (II) catalysed sulfur dioxide oxidation in aqueous solution at environmental concentrations. Atmospheric Environment 18(1): p. 145 - 151.
- 20 INRS-EAU. Exposé traitant des émissions de soufre et de l'acidité des précipitations. 19 p.
- 1036 IRIBARNE, J.V., L.A. BARRIE, A. IRIBARNE, 1983. Effect of freezing on sulfur dioxide dissolved in supercooled droplets. Atmospheric Environment 17(5): p. 1047 - 1050.
- 832 KELLOGG, W.W., R.D. CADLE, E.R. ALLEN, A.L. LAZRUS, E.A. MARTELL, 1972. The sulfur cycle. Science, 175(4022): p. 587 - 596.
- 1245 KLEINMAN, L.I., 1984. Oxidant requirements for the acidification of precipitation. Atmospheric Environment 18(7): p. 1453 - 1457.
- 32 LACHANCE, M., B. BOBEE, 1978. Etude de la variabilité du pH des précipitations autour de Rouyn - Noranda. INRS - Eau, Rapport soumis au Bureau d'études des substances toxiques (BCST) des Services de protection de l'environnement du Québec 95: 74 p.
- 1112 LAZRUS, A.L., P.L. HAAGENSON, G.L. KOK, ET AL., 1983. Acidity in air and water in a case of warm frontal precipitation. Atmospheric Environment 17(3): p. 581 - 591.
- 898 LEVINE, S.Z, S.E. SCHWARTZ, 1982. In-cloud and below-cloud scavenging of nitric acid vapor. Atmospheric Environment 16(7): p. 1725 - 1734.
- 1323 LIU, M.-K., R.E. MORRIS, J.P. KILLUS, 1984. Development of a regional oxidant model and application to the Northeastern United States. Atmospheric Environment 18(6): p. 1145 - 1161.

(section 1. 4)

- 998 MARSH, A.R.W., 1983. Studies of the acidity and chemical composition of clouds. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 185 - 194.
- 1152 MARTIN, A., 1984. Sulphate and nitrate related to acidity in rainwater. Water, Air, and Soil Pollution 21(1 - 4): p. 271 - 277.
- 672 MARTINEZ, R.I., J.T. HERRON, 1981. Gas - phase reaction of SO<sub>2</sub> with a criegee intermediate in the presence of water vapor. Journal of Environmental Science and Health, part A 16(6): p. 623 - 636.
- 1191 MARTINEZ, R.I., J.T. HERRON, 1983. Acid precipitation: the role of O<sub>3</sub> - Alkene - SO<sub>2</sub> systems in the atmospheric conversion of SO<sub>2</sub> to H<sub>2</sub>SO<sub>4</sub> aerosol. J. Environ. Sci. Health, A18(6): p. 739 - 745.
- 121 McLEAN, R.A.N., 1981. The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem. Implications for Control Strategies. Domtar Research Centre, Senneville, Québec. 9 p.
- 600 MOSS, M.R., 1975. Spatial Patterns of Precipitation Reaction. Environ. Pollution 8: p. 301 - 315.
- 1050 MUSOLD, G., O. LINDQVIST, 1983. Correlations between meteorological data and water - soluble sulphur compounds in fine aerosols. Atmospheric Environment 17(7): p. 1253 - 1260.
- 218 NORDO, J., A. ELAISSEN, J. SALTBOES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150
- 592 ODEN, S., 1976. The acidity Problem - An Outline of Concepts. Water, Air, and Soil Pollution 6: p. 137 - 166.
- 776 OPPENHEIMER, M., 1983. The relationship of sulfur emissions to sulfate in precipitation. Atmospheric Environment, 17(3): p. 451 - 460.

(section 1. 4)

- 936 PELLETT, G.L., D.I. SEBACHER, R.J. BENDURA, D.E. WORNOM, 1983. HCl in rocket exhaust clouds: atmospheric dispersion, acid aerosol characteristics, and acid rain deposition. Journal of the Air Pollution Control Association 33(4): p. 304 - 311.
- 1077 RADOJEVIC, M., 1983. H<sub>2</sub>O<sub>2</sub> in the atmosphere and its role in the aqueous oxidation of SO<sub>2</sub>. Environmental Technology Letters 4(12): p. 499 - 508.
- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.
- 852 REDA, M., G.R. CARMICHAEL, 1982. Non - isothermal effects on SO<sub>2</sub> absorption by water droplets - I. Model development. Atmospheric Environment, 16(1): p. 145 - 150.
- 853 REDA, M., G.R. CARMICHAEL, 1982. Non - isothermal effects on SO<sub>2</sub> absorption by water droplets - II. Results and discussion. Atmospheric Environment, 16(1): p. 151 - 159.
- 1527 RENNER, E., U. RATZLAFF, W. ROLLE, 1985. A lagrangian multi-level model of transport, transformation and deposition of atmospheric sulfur dioxide and sulfate. Atmos. Environ. 19(8): p. 1351 - 1360.
- 689 ROBINSON, J.W., H. GHANE, 1982. Occurrence of acid rain in Baton Rouge, Louisiana, Summer 1981. The role of the catalytic converter. J. Environ. Sci. Health A17(1): p. 129 - 136.
- 997 ROMER, F.G. ET AL., 1983. Preliminary measurements from an aircraft into the chemical composition of clouds. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 195 - 203.
- 893 SCOTT, B.C., 1982. Predictions of in-cloud conversion rates of SO<sub>2</sub> to SO<sub>4</sub> based upon a simple chemical and kinematic storm model. Atmospheric Environment 16(7): p. 1735 - 1752.
- 1244 SEIGNEUR, C., P. SAXENA, 1984. A study of atmospheric acid formation in different environments. Atmospheric Environment 18(10): p. 2109 - 2124.

(section 1. 4)

- 1536 SEIGNEUR, C., P. SAXENA, V.A. MIRABELLA, 1985. Diffusion and reaction of pollutants in stratus clouds; application to nocturnal acid formation in plumes. Environ. Sci. Technol. 19(9): p. 821 - 828.
- 848 STELSON, A.W., J.H. SEINFELD, 1982. Thermodynamic prediction of the water activity, NH<sub>4</sub>NO<sub>3</sub> dissociation constant, density and refractive index for the NH<sub>4</sub>NO<sub>3</sub>-(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O system at 25 °C. Atmospheric Environment 16(10): p. 2507 - 2514.
- 842 SUMMERS, P.W., 1983. Sources, transport atmosphérique et dépôt acide: une perspective mondiale. Bulletin de la Qualité des Eaux VIII(2): p. 81 - 88.
- 1547 SUTO, M., E.R. MANZANARES, L.C. LEE, 1985. Detection of sulfuric-acid aerosols by UV scattering. Environ. Sci. Technol. 19(9): p. 815 - 820.
- 1032 TANI, B., S. SIEGEL, S.A. JOHNSON, R. KUMAR, 1983. X - Ray diffraction investigation of atmospheric aerosols in the 0.3 - 1.0 μm aerodynamic size range. Atmospheric Environment 17(11): p. 2277 - 2283.
- 1550 VADJIC, V., M. GENTILIZZA, 1985. The effect of manganese dioxide and some manganese salts on the behavior of sulfur dioxide in the air investigated on model systems. Sci. Total Environ. 44(3): p. 245 - 252.
- 1040 WILDER, J.M., M.J. PILAT, 1983. Calculated droplet size distributions and opacities of condensed sulfuric acid aerosols. J. Air Pollut. Control Assoc. 33(9): p. 858 - 863.
- 745 WILLIAMS, D.J., J.N. CARRAS, J.W. MILNE, 1981. The oxidation and long - range transport of sulphur dioxide in a remote region. Atmospheric Environment 15(10 - 11): p. 2255 - 2262.

## 1. 5 Précipitations et dépôts

- 858 ABRAHAMSEN, G., A.O. STUANES, B. TVEITE, 1983. Les polluants atmosphériques aéroportés sur de longues distances et leurs effets sur les forêts en Scandinavie. Bulletin de la Qualité des Eaux VIII(2): p. 89 - 95.
- 298 ABRAHAMSEN, G., K. BJOR, O. TEIGEN, 1976. Field experiments with simulated acid rain in forest ecosystems. SNSF - Project, Rapport 4/76, Oslo: 15 p.
- 899 ADEWUYI, Y.G., G.R. CARMICHAEL, 1982. A theoretical investigation of gaseous absorption by water droplets from SO<sub>2</sub> - HNO<sub>3</sub> - NH<sub>3</sub> - CO<sub>2</sub> - HCl mixtures. Atmospheric Environment 16(4): p. 719 - 729.
- 713 AGNEW, T.A., E. WILSON, L.A. BARRIE, J.D. REID, D. FAULKNER, 1982. Estimation of long term acidic deposition over snow and snowmelt shock potential. Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées, Fredericton, 14 - 15 juin 1982. p. 597 - 614.
- 643 AKIELASZEK, J.J., T.A. HAINES, 1981. Mercury in the muscle tissue of fish from three northern Maine lakes. Bulletin of Environmental Contamination and Toxicology, 27(2): p. 201 - 108.
- 1423 ANDERSEN, R., I.F. MUNIZ, J. SKURDAL, 1984. Effects of acidification on age class composition in arctic char Salvelinus-alpinus and brown trout Salmo-trutta in a coastal area southwest Norway. Inst. Freshwater Res. Drottningholm Rep. 61: p. 5 - 15.
- 602 ANLAUF, K.G., H.A. WIEBE, R.O.S. STEVENS, 1976. Some Measurements of Air Quality and Precipitation in Saint - John, N.B. Water, Air, and Soil Pollution 5: p. 507 - 514.
- 1075 ASMAN, W.A.H., P.J. JONKER, J. SLANINA, J.H. BAARD, 1982. Neutralization of acid in precipitation and some results of sequential rain sampling. In: Deposition of Atmospheric Pollutants, H.W. Georgii and J. Pankrath (eds.). p. 115 - 123.

(section 1. 5)

- 900 ASMAN, W.A.H., T.B. RIDDER, H.F.R. REIJNDERS, J. SLANINA, 1982. Influence and prevention of bird - droppings in precipitation chemistry experiments. Water, Air and Soil Pollution 17(4): p. 415 - 420.
- 641 ASMAN, W.A.H., J. SLANINA, J.H. BAARD, 1981. Meteorological interpretation of the chemical composition of rain - water at one measuring site. Water, Air and Soil Pollution, 16(2): p. 159 - 175.
- 198 BAKER, J., D. HOCKING, M. NYBORG, 1977. Acidity of Open and Intercepted Precipitation in Forests and Effects on Forest Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 449 - 460.
- 242 BAKER, M.B., D. CANIPAROLI, H. HARRISON, 1981. An analysis of the first year of multi state atmospheric power production pollution study rain chemistry measurements. Atmospheric Environment 15(1): p. 43 - 55.
- 390 BARICA, J., F.A.J. ARMSTRONG, 1971. Contribution by snow to the nutrient budget of some small northwest Ontario lakes. Limnology and Oceanography, 16(6): p. 891 - 899.
- 220 BARRETT, E., G. BRODIN, 1955. The Acidity of Scandinavian Precipitation. Tellus 7: p. 251 - 257.
- 269 BARRIE, L.A., 1981. The prediction of rain acidity and SO<sub>2</sub> scavenging in eastern North America. Atmospheric Environment 15(1): p. 31 - 41.
- 975 BARRIE, L.A., A. SIROIS, 1982. An analysis and assessment of precipitation chemistry measurements made by CANSAP. (the Canadian Network for Sampling Precipitation): 1977 - 1980. Report AQRB-82-003-T. Environment Canada, Atmospheric Environment Service. 163 p.
- 976 BARRIE, L.A., A. SIROIS, 1982. Analyse et évaluation des mesures de la chimie des précipitations faites par le RCEP. (Réseau Canadien d'Echantillonnage des Précipitations): 1977 - 1980. Rapport ARQB-82-003-T. Environnement Canada, Service de l'environnement atmosphérique. 161 p.

(section 1. 5)

- 483 BARRIE, L.A., H.A. WIEBE, K. ANLAUF, P. FELLIN, 1980. The Canadian Air and Precipitation Monitoring Network APN. In: Atmospheric Pollution 1980, Proceedings of the 14th International Colloquium, Paris, France, May 5 - 8, 1980. M.M. Benarie (ed.), Studies in Environmental Science, volume 8: p. 355 - 360.
- 974 BARRIE, L.A., H.A. WIEBE, K. ANLAUF, P. FELLIN, 1982. Results of the canadian air and precipitation monitoring network APN: July 1980 to December 1981. Environment Canada, Atmospheric Environment Service, Downsview, Ontario. Report AQRB-82-009-T. 128 p.
- 105 BARRIE, L.A., H.A. WIEBE, P. FELLIN, K. ANLAUF, 1981. Results of the Canadian Air and Precipitation monitoring Network APN: July 1979 to June 1980. Environment Canada, Atmospheric Environment Service, Downsview, Ontario. Report: AQRB-81-026-T. 74 p.
- 147 BARRIE, L.A., H.A. WIEBE, P. FELLIN, K. ANLAUF, 1978. The Canadian Air and Precipitation Monitoring Network: A Description and Results for November 1978 to June 1979. Environment Canada, Atmospheric Environment Service, Downsview, Ontario. Report AQRB-80-002-T. 80 p.
- 1396 BARRIE, L.A., J.M. HALES, 1984. The spatial distributions of precipitation acidity and major ion wet deposition in north america during 1980. Tellus Ser. B Chem. Phys. Meteorol. 36(5): p. 333 - 355.
- 1285 BARRIE, L.A., K. ANLAUF, H.A. WIEBE, P.FELLIN, 1983. Acidic pollutants in air and precipitation at selected rural locations in Canada. Proc. Amer. Chem. Soc. Symp. on Acid Rain, March 1982, Las Vegas, Nev., J.I. Teasly (ed.), Ann Arbor Science. p. 15 - 35.
- 1256 BARRIE, L.A., R.J. VET, 1984. The concentration and deposition of acidity, major ions and trace metals in the snowpack of the eastern canadian shield during the Winter of 1980 - 1981. Atmospheric Environment 18(7): p. 1459 - 1469.
- 1334 BARTELS, U., J. BLOCK, 1985. Measurement of total acid deposition into spruce and beech forest in Northrhine-Westfalia. Z. Pflanzenernaehr. Bodenkd. 148(6): p. 689 - 698.

(section 1. 5)

- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 534 BEAMISH, R.J., G.A. MCFARLANE, J.C. VAN LOON, J. LICHWA, 1975. An Examination of the possible effects of Sudbury nickel mining and smelting operations on fishes and the water chemistry of lakes within the whitefish lake indian reserve. Environnement Canada, Service des Pêches et des Sciences de la mer. Rapport technique no 579. 52 p.
- 597 BEAMISH, R.J., J.C. VAN LOON, 1977. Precipitation Loading of Acid and Heavy Metals to a Small Acid Lake near Sudbury, Ontario. Journal Fisheries Research Board of Canada 34(5): p. 649 - 658.
- 176 BERRY, R.L., 1979. The Canadian Network for Sampling Precipitation (CANSAP) Project. Summary for the Period May 1977 to April 1978. LRTAP Project no. 4.2.1. 9 p.
- 1096 BEWLEY, R.J.F., G. STOTZKY, 1983. Anionic constituents of acid rain and microbial activity in soil. Soil. Biol. Biochem. 15(4): p. 431 - 437.
- 1043 BILONICK, R.A., 1983. Risk qualified maps of hydrogen ion concentration for the New York state area for 1966 - 1978. Atmospheric Environment 17(12): p. 2513 - 2524.
- 1430 BILONICK, R.A., 1985. The space-time distribution of sulfate deposition in the northeastern USA. Atmospheric Environment 19(11): p. 1829 - 1846.
- 1047 BILONICK, R.A., D.G. NICHOLS, 1983. Temporal variations in acid precipitation over New York state - What the 1965 - 1979 USGS data reveal. Atmospheric Environment 17(6): p. 1063 - 1072.
- 1109 BJARNBORG, B., 1983. Dilution and acidification effects during the spring flood of four Swedish mountain brooks. Hydrobiologia 101(1 - 2): p. 19 - 26.
- 1419 BLOXAM, R.M., J.W. HORNBECK, C.W. MARTIN, 1984. The influence of storm characteristics on sulfate in precipitation. Water Air Soil Pollut. 23(4): p. 359 - 374.
- 671 BOLIN, B., L. GRANAT, 1973. Local fallout and long - distance transport of sulfur. Ambio 2: p. 87 - 90.

(section 1. 5)

- 1432 BOSMAN, H.H., P.L. KEMPSTER, 1985. Precipitation chemistry of Roodeplaat Dam catchment, South Africa. Water S. A. (Pretoria) 11(3): p. 157 - 164.
- 400 BOUTRON, C., R. DELMAS, 1980. Historical Record of Global Atmospheric Pollution Revealed in Polar Ice Sheets. Ambio 9(5): p. 210 - 215.
- 1565 BRAEKKE, F.H., 1980. Sulphate dynamics in natural environments; preliminary results from a case study. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 156 - 157.
- 1235 BRANCO, J.S., S.J. FORMOSINHO, 1983. pH of rainwater in Coimbra, Portugal: The seasonal variation. Tellus 35B(3): p. 237 - 239.
- 1033 BREWER, R.L., R.J. GORDON, L.S. SHEPARD, 1983. Chemistry of mist and fog from the Los Angeles urban area. Atmospheric Environment 17(11): p. 2267 - 2270.
- 275 BREZONIK, P.L., E.S. EDGERTON, C.D. HENDRY, 1980. Acid Precipitation and Sulfate Deposition in Florida. Science 208: p. 1027 - 1029.
- 1165 BRIDGMAN, H.A., 1984. Mesoscale spatial variability of sulfate in air and rainwater at St. Louis. Water, Air, and Soil Pollution 22(2): p. 153 - 172.
- 797 BRIMBLECOMBE, P., D.H. STEDMAN, 1982. Historical evidence for a dramatic increase in the nitrate component of acid rain. Nature, 298(5873): p. 460 - 462.
- 217 BROSSET, C., K. ANDREASSON, M. FERM, 1975. The Nature and Possible Origin of Acid Particles Observed at the Swedish West Coast. Atmospheric Environment 9: p. 631 - 642.
- 360 BUDD, W.W., A.H., JOHNSON, J.B. HUSS, R.S. TURNER, 1981. Aluminum in Precipitation, Streams, and Shallow Groundwater in the New Jersey Pine Barrens. Water Resources Research 17(4): p. 1179 - 1183.
- 1175 BULATKIN, G.A., 1983. Acidity of atmospheric precipitation in a biosphere preserve. Soviet Journal of Ecology (Ekologiya) 14(2): p. 92 - 95.

(section 1. 5)

- 1631 CADLE, S.H., J.M. DASCH, 1987. Composition of snowmelt and runoff in northern Michigan. Environ. Sci. Technol. 21(3): p. 295 - 299.
- 1184 CADLE, S.H., J.M. DASCH, N.E. GROSSNICKLE, 1984. Retention and release of chemical species by a northern Michigan snowpack. Water, Air, and Soil Pollution 22(3): p. 303 - 319.
- 1436 CALVERT, J.G., A. LAZRUS, G.L. KOK, B.G. HEIKDES, J.G. WALEGA, J. LIND, C.A. CANTRELL, 1985. Chemical mechanisms of acid generation in the troposphere. Nature 317(6032): p. 27 - 39.
- 1441 CARMICHAEL, G.R., L.K. PETERS, T. KITADA, 1986. A second generation model for regional-scale transport-chemistry deposition. Atmospheric Environment 20(1): p. 173 - 188.
- 1110 CARMICHAEL, G.R., M. REDA, 1982. Non - Isothermal SO<sub>2</sub> absorption by water droplets - The effects of precipitation intensity, sulfate aerosol scavenging and aqueous S(IV) oxidation. Atmospheric Environment 16(12): p. 2905 - 2915.
- 1028 CARON, F., 1983. Détermination, à l'aide des isotopes stables du soufre, de la proportion des sulfates des lacs qui provient des précipitations. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 23 p.
- 1600 CARON, F., 1984. Evaluation, à l'aide des mesures des rapports des isotopes stables du soufre et de l'oxygène, de la proportion des sulfates mesurés dans les lacs attribuable aux dépôts atmosphériques. Université du Québec, Institut National de la Recherche Scientifique, Mémoire de maîtrise. 100 p.
- 1290 CASE, J.W., 1984. Lichen biomonitoring networks in Alberta. Environmental Monitoring and Assessment 4: p. 303 - 313.
- 1314 CASTELL, C.H., I. NOVACZEK, J.D. CASTELL, 1984. A study of the acidity of three Dartmouth, Nova Scotia lakes 1: The pH of precipitation falling on Micmac lake. Can. Tech. Rep. Fish. Aquat. Sci. 1231. 31p.
- 1029 CASTILLO, R.A., J.E. JIUSTO, 1983. The pH and ionic composition of stratiform cloud water. Atmospheric Environment 17(8): p. 1497 - 1505.

(section 1. 5)

- 1388 CEHAK, K., CHALUPA, K., 1985. Observations of various chemical contaminants of the precipitation at a BAPMON station in the eastern pre-alpine region , Austria. Arch. Meteorol. Geophys. Bioclimatol. Ser. B. Climatol. Environ. Meteorol. Radiat. Res. 35(4): p. 307 - 322.
- 786 CHADWICK, M.J., 1983. Acid depositions and the environment. Ambio 12(2): p. 80 - 82.
- 1355 CHAN, W.H., M.A. LUSIS, 1985. Post-superstack Sudbury smelter emissions and their fate in the atmosphere; an overview of the Sudbury environment study results. Water Air Soil Pollut. 26(1): p. 43 - 58.
- 838 CHAN, W.H., C.U. RO, M.A. LUSIS, R.J. VET, 1982. Impact of the Inco nickel smelter emissions on precipitation quality in the Sudbury area. Atmospheric Environment 16(4): p. 801 - 814.
- 1302 CHAN, W.H., R.J. VET, C.-U. RO, A.J.S. TANG, M.A. LUSIS, 1984. Long-term precipitation quality and wet deposition fields in the Sudbury basin. Atmospheric Environment 18(6): p. 1175 - 1188.
- 693 CHARLSON, R.J., H. RODHE, 1982. Factors controlling the acidity of natural rainwater. Nature 295(5851): p. 683 - 685.
- 1017 CHESTER, P.F., 1981. Acid rain, SO<sub>2</sub>, emissions and fisheries. IEEE Power Engineering Society. Special publication (20): p. 13 - 18.
- 743 CHRISTOPHERSEN, N., A.O. STUANES, R.F. WRIGHT, 1982. Runoff Chemistry at a Mini - Catchment Watered with "Unpolluted Precipitation". Nordic Hydrology 13: p. 115 - 128.
- 742 CHRISTOPHERSEN, N., H.M. SEIP, C. QVENILD, O. TOLLAN, 1982. Sodium mobility in a mini - catchment studied with radioactive tracers and artificial precipitation. Nordic Hydrology 13: p. 105 - 114.
- 145 CHRISTOPHERSEN, N., R.F. WRIGHT, 1981. Sulfate Budget and a Model for Sulfate Concentrations in Stream Water at Birkenes, a Small Forested Catchment in Southernmost Norway. Water Resources Research 17(2): p. 377 - 389.

(section 1. 5)

- 280 CHUNG, Y.S., 1977. The Distribution of Atmospheric Sulphates in Canada and its Relationship to Long - Range Transport of Air Pollutants. Environnement atmosphérique, Rapport ARQT-1-77. Downsview, Ontario. 19 p.
- 1139 CHURCH, M.R., J.N. GALLOWAY, 1984. Application of Henriksen's "acidification indicator" and "predictor nomograph" to two Adirondack lakes. Water, Air and Soil Pollution 22(2): p. 111 - 120.
- 1614 CLAIR, T.A., 1986. Chemical and physical characteristics of snow in the Kejimikujik National Park area. Environment Canada, Inland Waters Directorate, Atlantic region, Moncton, N.B. Report no. IWD-AR-WQB-86-95. 56 p.
- 137 CLAIR, T.A., J.P. WITTEMAN, S.H. WHITLOW, 1982. Acid Precipitation Sensitivity of Canada's Atlantic Provinces. Environment Canada, Inland Waters Directorate, Ottawa. Technical Bulletin no 124. 23 p.
- 252 COGBILL, C.V., 1976. The History and character of acid precipitation in eastern North America. Water, Air, and Soil Pollution 6 (2/3/4): p. 407 - 413.
- 468 COGBILL, C.V., G.E. LICKENS, 1974. Acid Precipitation in the North - eastern United States. Water Resources Research, 10(6): p. 1134 - 1137.
- 1288 COGBILL, C.V., G.E. LIKENS, T.A. BUTLER, 1984. Uncertainties in historical aspects of acid precipitation: getting it straight. Atmospheric Environment 18(10): p. 2261 - 2268.
- 467 COLBECK, S.C. 1981. A simulation of the enrichment of atmospheric pollutants in snow cover runoff. Water Resources Research, 17(5): p. 1383 - 1388.
- 219 CONROY, N., K. HAWLEY, W. KELLER, C. LAFRANCE, 1976. Influences of the Atmosphere on Lakes in the Sudbury Area. Journal of Great Lakes Research 2: p. 146 - 165.
- 669 COOPER, H.B.H. Jr., J.A. LOPEZ, 1976. Chemical composition of acid precipitation in central Texas. Water, Air, and Soil Pollution 6: p. 351 - 359.
- 1336 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.F. WRIGHT, 1985. Modeling the effects of acid deposition: Assessment of a lumped parameter model of soil water and stream chemistry. Water Resour. Res. 21(1): p. 51 - 63.

(section 1. 5)

- 120 COWLING, E.B., L.S. DOCHINGER. 1979. Effects of Acid Rain on Crops and Trees. American Society for Civil Engineers. ASCE preprint, NO. 3598: p. 21 - 54.
- 925 CRAMPTON, C.B., 1983. Variations of pH with annual precipitation in loamy forest soils. Canadian Journal of Soil Science 63(2): p. 401 - 403.
- 146 CRONAN, C.S., C.L. SCHOFIELD, 1979. Aluminum Leaching Response to Acid Precipitation: Effects on High - Elevation Watersheds in the Northeast. Science, 204: p. 304 - 306.
- 820 DANA, M.T., 1980. SO<sub>2</sub> versus sulfate wet deposition in the eastern United States. Journal of geophysical Research, 85(C8): p. 4475 - 4480.
- 1448 DASCH, J.M., S.H. CADLE, 1985. Wet and dry deposition monitoring in southeastern Michigan, USA. Atmospheric Environment 19(5): p. 789 - 796.
- 1151 DASCH, J.M., S.H. CADLE, G.T. WOLFF, 1984. Summertime study of acid deposition in the Detroit area. Water, Air, and Soil Pollution 21(1 - 4): p. 51 - 70.
- 664 DAVIES, T.D., 1976. Precipitation scavenging of sulphur dioxide in an industrial area. Atmospheric Environment 10: p. 879 - 890.
- 665 DAVIES, T.D., 1979. Dissolved sulphur dioxide and sulphate in urban and rural precipitation. (Norfolk, U.K.) Atmospheric Environment 13: p. 1275 - 1285.
- 579 DE BARY, E., C. JUNGE, 1963. Distribution of Sulfur and Chlorine over Europe. Tellus 15(4): p. 370 - 381.
- 1090 DEAL, W.J., 1983. The quantity of acid in acid fog. Journal of the Air Pollution Control Association 33(7): p. 691 - 692.
- 363 DELISLE, C.E., 1979. Impacts des précipitations acides et contaminées par les métaux lourds sur les écosystèmes aquatiques. Conférence sur les contaminants dans l'environnement, Québec, 14 - 15 mai. 26 p.

(section 1. 5)

- 81 DELISLE, C.E., J. KLOPPENBURG, J. SYLVAIN, 1979. Le mercure et l'acidité dans les précipitations au Nord - Ouest Québécois. Ecole polytechnique, Section du génie de l'environnement, Eau du Québec, avril 1979, 12(2): p. 76 - 85.
- 1606 DELISLE, C.E., M.A. BOUCHARD, P. ANDRE, 1984. Les précipitations acides et leurs effets au nord du 55ème parallèle du Québec. Ecole Polytechnique de Montréal et l'Université de Montréal. Rapport présenté à la fondation canadienne Donner. Janvier 1984. 134 p.
- 1007 DELMAS, R.J., G. GRAVENHORST, 1983. Background precipitation acidity. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 82 - 107.
- 1150 DERRICK, M.R., J.L. MOYERS, K.A. YARBOROUGH, M. WARREN, 1984. Aerosol and precipitation chemistry relationships at Big Bend National Park. Water, Air, and Soil Pollution 21(1 - 4): p. 171 - 181.
- 1590 DESAUTELS, G., R. GILBERT, 1985. Résultats d'un réseau à méso-échelle mesurant l'acidité des précipitations sur le sud du Québec (16 août - 30 septembre 1982). Environnement Canada, Service de l'environnement atmosphérique, Division des services scientifiques, Région du Québec. Rapport interne, juillet 1985. 125 p.
- 1453 DETHIER, D.P., S.B. JONES, 1985. Atmospheric and weathering contributions to stream chemistry northwestern Massachusetts, USA. Northeast Environ. Sci. 4(1): p. 8 - 17.
- 603 DILLON, P.J., D.S. JEFFRIES, W. SNYDER, R. REID, N.D. YAN, ET AL, 1978. Acidic Precipitation in South - Central Ontario: Recent Observations. Journal Fisheries Research Board of Canada 35: p. 809 - 815.
- 425 DILLON, P.J., N.D. YAN. W.A. SCHEIDER, N. CONROY, 1977. Acidic Lakes in Ontario: Characterization, Extent, and Responses to Base and Nutrient Additions. Ontario Ministry of the Environment. 39 p.
- 1454 DOKIYA, Y., Y. KATSURAGI, 1985. Chemical components in the precipitation at Komoro and Tsukuba, Japan in 1983. J. Environ. Sci. Health part A. Environ. Sci. Eng. 20(3): p. 269 - 292.

(section 1. 5)

- 958 DOLLARD, G.J., M.H. UNSWORTH, M.J. HARVE, 1983. Pollutant Transfer in upland regions by occult precipitation. Nature 302 (5905): p. 241 - 242.
- 297 DOVLAND, H., A. ELIASSEN, 1977. Estimates of dry deposition on snow. SNSF - Project, rapport IR 34/77, Oslo: 17 p.
- 292 DOVLAND, H., A. SEMB, 1978. Deposition and runoff of sulphate in the Tovdal river. A study of the mass balance for September 1974 - August 1976, SNSF - Project, rapport IR 38/78. Oslo. 22 p.
- 1058 DRAXLER, R.R., 1983. Lagrangian meteorology and measurements of acidic precipitation at Washington, DC. Atmospheric Environment 17(12): p. 2525 - 2531.
- 821 DREWES, D.R., J.M. HALES, 1982. Smicka scavenging model incorporating chemical kinetics. Atmospheric Environment, 16(7): p. 1717 - 1724.
- 1134 DUPONT, J., 1984. Nature et étendue de l'acidification de 64 lacs de la région de Rouyn - Noranda. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-9. 127 p.
- 1209 DUPONT, J., 1984. Nature et étendue de l'acidification de 97 lacs de la région de Portneuf. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-10. 113 p.
- 660 DURRAN, D.R., M.J. MELDGIN, M. LIU, 1979. A study of long range air pollution problems related to coal development in the northern great plains. Atmospheric Environment 13: p. 1021 - 1037.
- 1097 EATON, J.S., G.E. LIKENS, F.H. BORMANN, 1978. The input of gaseous and particulate sulfur to a forest ecosystem. Tellus 30: p. 546 - 551.
- 1088 EATON, J.S., G.E. LIKENS, F.H. BORMANN, 1980. Wet and dry deposition of sulfur at Hubbard Brook. In: Effects of acid precipitation of Terrestrial ecosystems, T.C. Hutchinson and M. Havas (eds). p. 69 - 75.

(section 1. 5)

- 453 EDGERTON, E.S., P.L. BREZONIK, C.D. HENDRY. 1981. Atmospheric deposition of acidity and sulfur in Florida. In: Atmospheric pollutants in natural waters, Ann Arbor Science Publishers, Michigan. ISBN 0-250-40369-2. p. 237 - 258.
- 439 ELGMORK, K., A. HAGEN, A. LANGELAND, 1973. Polluted snow in southern Norway during the winters 1968 - 1971. Environmental pollution, 4: p. 41 - 52.
- 1455 ELLIS, J.H., E.A. MCBEAN, G.J. FARQUHAR, 1985. Chance-constrained-stochastic linear programming model for acid rain abatement 1. Complete colinearity and noncolinearity. Atmospheric Environment 19(6): p. 925 - 938.
- 1120 ELZERMAN, A.W., 1983. Effects of acid deposition (rain) on a Piedmont aquatic ecosystem: Acid inputs, neutralization and pH changes. Clemson University, Final Technical Completion Report to Bureau of Reclamation U.S. Department of the Interior, Washington, Project no. B-141-SC. 79 p.
- 763 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 654 EVANS, L.S., 1979. A plant developmental system to measure the impact of pollutants in rain water. J. Air Pollut. Control Assoc. 29(11): p. 1145 - 1148.
- 1243 EVANS, L.S., G.S. RAYNOR, D.M.A. JONES, 1984. Frequency distributions for durations and volumes of rainfalls in the Eastern United States in relation to acidic precipitation. Water, Air, and Soil Pollution 23(2): p. 187 - 195.
- 824 EVANS, L.S., K.F. LEWIN, E.A. CUNNINGHAM, 1982. Effects of simulated acidic rain on yields of field - grown radishes and garden beets. Agriculture and Environment, 7(3 - 4): p. 285 - 298.
- 1458 FAY, J.A., D. COLOMB, S. KAMAR, 1985. Source apportionment of wet sulfate deposition in eastern North America. Atmospheric Environment 19(11): p. 1773 - 1782.

(section 1. 5)

- 944 FEELEY, J.A., H.M. LILJESTRAND, 1983. Source contributions to acid precipitation in Texas. Atmospheric Environment 17(4): p. 807 - 814.
- 1044 FERGUSON, P., J.A. LEE, 1983. Past and present sulphur pollution in the southern Pennines. Atmospheric Environment 17(6): p. 1131 - 1137.
- 142 FICKE, J.F., 1977. Air pollution: Impact on Water. Proc. of the 32nd annual meeting, Soil Conservation Society of America. Aug. 7 - 10, 1977. p. 208 - 211.
- 318 FISHER, B.E.A., 1981. Effect of enrichment in marine aerosols on estimated background concentration of sulphate in precipitation. Atmospheric Environment 15(6): p. 1095 - 1096.
- 826 FISHER, B.E.A., 1982. The transport and removal of sulphur dioxide in a rain system. Atmospheric Environment, 16(4): p 775 - 783
- 845 FISHER, B.E.A., 1982. Deposition of sulphur and the acidity of precipitation over Ireland. Atmospheric Environment 16(11): p. 2725 - 2734.
- 408 FISHER, D.W., A.W. GAMBELL, G.E. LIKENS, F.H. BORMANN, 1968. Atmospheric Contributions to Water Quality of Streams in the Hubbard Brook Experimental Forest, New-Hampshire. Water Resources Research 4(5): p. 1115 - 1126.
- 211 FORLAND, E.J., 1973. A Study of the Acidity in the Precipitation in Southwestern Norway. Tellus 25: p. 291 - 299.
- 261 FORLAND, E.J., Y.T. GJESSING, 1975. Snow Contamination from Washout/Rainout and Dry Deposition. Atmospheric Environment 9: p. 339 - 352.
- 1400 FOSTER, N.W., 1985. Acid precipitation and soil solution chemistry within a maple-birch forest in Canada. For. Ecol. Manage. 12(3-4): p. 215 - 232.
- 952 FOSTER, N.W., J.A. NICOLSON, 1983. Acid precipitation and vegetation interaction in the Turkey Lake forest watershed. Canadian Forestry Service Research Notes, 3(2): p. 6 - 7.

(section 1. 5)

- 798 FOWLER, D., J.N. CAPE, I.D. LEITH, I.S. PATERSON, J.W. KINNAIRD, I.A. NICHOLSON, 1982. Rainfall acidity in northern Britain. Nature, 297(5865): p. 383 - 386.
- 1576 FREEDMAN, B., T.A. CLAIR. 1986. Ion mass balances and seasonal fluxes from four acidic brownwater streams in Nova Scotia. Environment Canada, Inland Waters Directorate, Atlantic Region. Moncton, N.B. Report no. IWD-AR-WQB-86-98. 35 p.
- 514 FRINK, C.R., G.K. VOIGT, 1976. Potential Effects of Acid Precipitation on Soils in the Humid Temperate Zone. In: Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 685 - 709.
- 109 FRIZZOLA, J.A., J.A. BAIER, 1975. Contaminants in Rainwater and Their Relation to Water Quality, Part II. Water and Sewage works 122 (9): p. 94 - 95.
- 329 GALLOWAY, J.N., 1976. Critical Factors in the Collection of Precipitation for Chemical Analysis. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 65 - 81.
- 144 GALLOWAY, J.N., 1977. Air Pollution: Impact on aquatic ecosystems. Proc. of the 32nd Annual Meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 211 - 215.
- 4 GALLOWAY, J.N., E.B. COWLING, 1978. The Effects of Precipitation on Aquatic and Terrestrial Ecosystems: A Proposed Precipitation Chemistry Network. Journal of the Air Pollution Control Association, 28(3): p. 229 - 235.
- 347 GALLOWAY, J.N., G.E. LIKENS, 1981. Acid Precipitation: The Importance of Nitric Acid. Atmos. Environ. 15(6): p. 1081 - 1085.
- 513 GALLOWAY, J.N., G.E. LIKENS, E.S. EDGERTON, 1976. Hydrogen Ion Speciation in the Acid Precipitation of the Northeastern United States. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 383 - 396.

(section 1. 5)

- 685 GALLOWAY, J.N., G.E. LIKENS, E.S. EDGERTON, 1976. Acid Precipitation in the Northeastern United States: pH and Acidity. Science 194: p. 722 - 724.
- 1295 GALLOWAY, J.N., G.E. LIKENS, M.E. HAWLEY, 1984. Acid precipitation: natural versus anthropogenic components. Science 226(4676): p. 829 - 831.
- 1318 GALLOWAY, J.N., D.W. WHELPDALE, G.T. WOLFF, 1984. The flux of S and N eastward from North America. Atmospheric Environment 18(12): p. 2595 - 2607.
- 214 GARLAND, J.A., 1981. Enrichment of Sulphate in Maritime Aerosols. Atmospheric Environment 15(5): p. 787 - 791.
- 325 GATZ, D.F., 1976. Wet Deposition Estimation Using Scavenging Ratios. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 21 - 32.
- 1459 GELLINI, R., F. PANTANI, P. GROSSONI, F. BUSSOTTI, E. BARBOLANI, C. RINALLO, 1985. Further investigation on the causes of disorder of the coastal vegetation in the park of San-Rossore, central Italy. Eur. J. For. Pathol. 15(3): p. 145 - 157.
- 1002 GEORGII, H.W., C. PERSEKE, E. ROHBOCK, 1983. Wet and dry deposition of acidic and heavy metal components in the federal republic of Germany. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 142 - 148.
- 299 GETHER, J., G. LUNDE, J. MARKALI, 1976. Particulate material in atmospheric fallout and precipitation over the south of Norway. SNSF - Project, Rapport 7/76, Oslo: 15 p.
- 300 GETHER, J., N. GJOS, G. LUNDE, 1976. Isolation and characterisation in precipitation of organic micropollutants associated with long-range transport in air. SNSF-Project, Rapport 8/76. Oslo. 12 p.

(section 1. 5)

- 1460 GIBIAN, G.P., 1985. Predicting deposition reductions using long-range transport models; some policy implications. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 137 - 172.
- 413 GJESSING, E.T., 1974. Effects of Polluted Precipitation on Water Quality. In: Seventh International Conference on Water Pollution Research, Paris: p. 725 - 731.
- 155 GJESSING, E.T., A. HENRIKSEN, M. JOHANNESSEN, R. WRIGHT, 1976. Effects of Acid Precipitation on Freshwater Chemistry. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(Ed). Research Report 6/76. p. 65 - 85.
- 1461 GLASS, G.E., O.L. LOUCKS, 1986. Implications of a gradient in acid and ion deposition across the northern Great Lakes states, USA. Environ. Sci. Technol. 20(1): p. 35 - 43.
- 1286 GOKLANY, I.M., G.F. HOFFNAGLE, 1984. Trends in emissions of PM, SO<sub>x</sub> and NO<sub>x</sub>, VOC: NO<sub>x</sub> ratios and their implications for trends in pH near industrialized areas. J. Air Pollut. Control Assoc. 34(8): p. 844 - 846.
- 1048 GOLOMB, D., 1983. Acid deposition - precursor emission relationship in the northeastern U.S.A.: The effectiveness of regional emission reduction. Atmospheric Environment 17(7): p. 1387 - 1390.
- 1019 GOLOMB, D., S. BATTERMAN, J. GRUHL, W. LABYS, 1983. Sensitivity analysis of the kinetics of acid rain models. Atmospheric Environment 17(3): p. 645 - 653.
- 404 GORHAM, E., 1967. Some Chemical Aspects of Wetland Ecology. Nat. Res. Council Canada, Assoc. Comm. on Geotech. Res., Tech. Memo no 90: p. 20 - 38.
- 594 GORHAM, E., 1976. Acid Precipitation and its Influence Upon Aquatic Ecosystems - An Overview. Water, Air, and Soil Pollution 6: p. 457 - 481.
- 1462 GORHAM, E., F.B. MARTIN, J.T. LITZAU, 1985. Acid rain; statistical analysis of ionic correlations questioned. Reply to comments. Science 228(4707): p. 1553.

(section 1. 5)

- 1463 GORHAM, E., S.J. EISENREICH, J. FORD, M.V. SANTELMANN, W. STUMM, 1985. The chemistry of bog waters. Chem. Processes Lakes p. 339 - 363.
- 295 GOTAAS, Y., 1977. Aircraft measurements of the deposition of sulphur dioxide to forest and to sea by the profile method. SNSF-Project, Rapport IR 30/77, Oslo: 22 p.
- 186 GRAHN, O., 1977. Macrophyte Succession in Swedish Lakes Caused by Deposition of Airborne Acid Substances. Water, Air and Soil Pollution 7 (3): p. 295 - 305.
- 327 GRANAT, L., 1976. Principles in Network Design for Precipitation Chemistry Measurements. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 42 - 55.
- 999 GRAVENHORST, G., A. BOTTGER, 1983. Field measurements of NO and NO<sub>2</sub> fluxes to and from the ground. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 172 - 184.
- 1000 GRAVENHORST, G., K.D. HOFKEN, H.W. GEORGII, 1983. Acidic input to a beech and spruce forest. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 155 - 171.
- 1313 GRAY, J.E., J.R.M. KELSO, 1984. An examination of historical lake and stream chemistry in north-central Ontario - can case histories document acidification?. Can. Tech. Rep. Fish. Aquat. Sci. 1223. 38 p.
- 799 GREENHILL, N.B., K.H. FUNG, K.I. PEVERILL, G.P. BRINER, 1982. Sulphur content of rainwater in Victoria, Australia. Search, 13(5 - 6): p. 153 - 155.
- 1210 GRIMARD, Y., 1984. Réseau d'échantillonnage des précipitations du Québec: Sommaire des données de la qualité des eaux de précipitations 1981 - 1982 - 1983. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-11. 163 p.
- 1211 GRIMARD, Y., 1984. Réseau d'échantillonnage des précipitations du Québec - Analyse et évaluation des sites d'échantillonnage. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-12. 77 p.

(section 1. 5)

- 88 HAGEN, A., A. LANGELAND, 1973. Polluted Snow in Southern Norway and the Effect of the Meltwater on Freshwater and Aquatic Organisms. Environmental Pollution 5: p. 45 - 57.
- 1093 HAINES, B., 1983. Forest ecosystem SO<sub>4</sub> - S input - output discrepancies and acid rain: are they related ?. Oikos 41(1): p. 139 - 143.
- 930 HAINES, T.A., 1983. Organochlorine residues in brook trout from remote lakes in the northeastern United States. Water, Air, and Soil Pollution 20(1): p. 47 - 54.
- 805 HALES, J., 1982. Mechanistic analysis of precipitation scavenging using a one-dimensional, time-variant model. Atmospheric Environment, 16(7): p. 1775 - 1783.
- 846 HANSEN, D.A., G.M. HIDY, 1982. Review of questions regarding rain acidity data. Atmospheric Environment 16(9): p. 2107 - 2126.
- 482 HARRIMAN, R., B.R.S. MORRISON. 1981. Forestry, fisheries and acid rain in Scotland. Scottish Forestry, 35(2): p. 89 - 95.
- 652 HARRIMAN, R., B.R.S. MORRISON, 1982. Ecology of streams draining forested and non-forested catchments in an area of central Scotland subject to acid precipitation. Hydrobiologia, 88(3): p. 251 - 263.
- 1042 HARRISON, R.M., C.A. PIO, 1983. A comparative study of the ionic composition of rainwater and atmospheric aerosols: Implications for the mechanism of acidification of rainwater. Atmospheric Environment 17(12): p. 2539 - 2543.
- 1018 HARTE, J., 1983. An investigation of acid precipitation in Qinghai province, China. Atmospheric Environment 17(2): p. 403 - 408.
- 1365 HARTE, J., G.P. LOCKETT, R.A. SCHNEIDER, H. MICHAELS, C. BLANCHARD, 1985. Acid precipitation and surface-water vulnerability on the western slope of the High Colorado USA Rockies. Water Air Soil Pollut. 25(3): p. 313 - 320.
- 1234 HARTLEN, J., T. LUNGGREN, 1983. Disposal of waste material - Evaluation in the KHM project of short and long-term effects. Wat. Sci. Tech. 15(11): p. 49 - 63.

(section 1. 5)

- 715 HELVEY, J.D., J.HUBBARD, D.R. De WALLE, 1982. Time trends in pH and specific conductance of streamflow from an undisturbed watershed in the central appalachians. In: Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées. Fredericton, 14-15 juin 1982, p. 637 - 651.
- 227 HENDREY, G.R., R.F. WRIGHT, 1975. Acid Precipitation in Norway: Effects on Aquatic Fauna. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of lake Waters. Intern. Assoc. Great Lakes Res. 28 sept. / 1 oct. 1975, Orillia, Ontario. p. 192 - 207.
- 276 HENDRY, C.D., P.L. BREZONIK, 1980. Chemistry of Precipitation at Gainesville, Florida. Environmental Science and Technology 14 (7): p. 843 - 849.
- 498 HENRIKSEN, A., 1980. Acidification of Freshwaters - A Large Scale Titration. Norwegian Institute for Water Research, Norway. 27 p.
- 1597 HENRIKSEN, A., L. LIEN, T.S. TRAAEN, I.S. SEVALDRUD, D.F. BRAKKE, 1988. Lake acidification in Norway: Present and predicted chemical status. Ambio 17(4): p. 259 - 266.
- 668 HENRIKSEN, A., R.F. WRIGHT, 1977. Effects of acid precipitation on a small acid lake in southern Norway. Nordic Hydrology 8: p. 1 - 10.
- 224 HERRMANN, A., 1975. Chemical Composition of a polluted snow cover. In: Isotopes et impuretés dans les neiges et glaces. Actes du colloque de Grenoble, Août/septembre 1975: p. 121 - 126.
- 463 HESSLEIN, R.H., 1979. Lake Acidification Potential in the Alberta Oil Sands Environmental Research Program Study Area. Alberta Oil Sands Environmental Research Program, 26 p.
- 518 HICKS, B.B., J.D. SHANNON, 1979. A Method for Modeling the Deposition of Sulfur by Precipitation over Regional Scales. Journal of Applied Meteorology 18: p. 1415 - 1420.
- 793 HILEMAN, B., 1983. Acid fog. Environment Science and Technology, 17(3): p. 117A - 120A.

(section 1. 5)

- 519 HOFFMAN, Jr., W.A., S.E. LINDBERG, R.R. TURNER, 1980. Precipitation Acidity: The Role of the Forest Canopy in Acid Exchange. J. Environ. Qual. 9(1): p. 95 - 100.
- 1292 HOLDREN, M.W., C.W. SPICER, J.M. HALES, 1984. Peroxyacetyl nitrate solubility and decomposition rate in acidic water. Atmospheric Environment 18(6): p. 1171 - 1173.
- 814 HOLT, B.D., R. KUMAR, P. T. CUNNINGHAM, 1982. Primary sulfates in atmospheric sulfates: Estimation by oxygen isotope ratio measurements. Science, 217: p. 51 - 53.
- 435 HORNBECK, J.W., G.E. LIKENS, 1974. The ecosystem concept for determining the importance of chemical composition of snow. In: Advanced Concepts and Techniques in the Study of Snow and Ice Resources. National Academy of Sciences, Washington, D.C. p. 139 - 151.
- 164 HORNBECK, J.W., G.E. LIKENS, J.S. EATON, 1977. Seasonal Patterns in Acidity of Precipitation and their Implications for Forest Stream Ecosystems. Water, Air and Soil Pollution 7: p. 355 - 365.
- 1569 HORNTVEDT, R., G.J. DOLLARD, E. JORANGER, 1980. Effects of acid precipitation on soil and forest; 2. Atmosphere - vegetation interactions. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan (eds.). Sandefjord, Norway, March 11-14, 1980. p. 192 - 193.
- 338 HULTBERG, H., O. GRAHN, 1976. Effects of acid Precipitation on Macrophytes in Oligotrophic Swedish Lakes. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 208 - 221.
- 924 IBRAHIM, M., L.A. BARRIE, F. FANAKI, 1983. An experimental and theoretical investigation of the dry deposition of particles to snow, pine trees and artificial collectors. Atmospheric Environment 17(4): p. 781 - 788.
- 20 INRS - EAU. Exposé traitant des émissions de soufre et de l'acidité des précipitations. 19 p.

(section 1. 5)

- 1036 IRIBARNE, J.V., L.A. BARRIE, A. IRIBARNE, 1983. Effect of freezing on sulfur dioxide dissolved in supercooled droplets. Atmospheric Environment 17(5): p. 1047 - 1050.
- 1573 JACKS, G., G. KNUTSSON, L. MAXE, A. FYLKNER, 1984. Effect of acid rain on soil and groundwater in Sweden. In: Pollutants in porous media. Springer-Verlag, New-York. B.Yaron, G.Dagan, J.Goldschmid eds. p. 94 - 114.
- 1296 JACOB, D.J., J.M. WALDMAN, J.W. MUNGER, M.R. HOFFMANN, 1985. Chemical composition of fogwater collected along the California coast, USA. Environ. Sci. Technol. 19(8): p. 730 - 736.
- 251 JACOBSON, J.S., L.I. HELLER, P. VAN LEUKEN, 1976. Acidic precipitation at a site within the northeastern conurbation. Water, Air and Soil Pollution 6 (2/3/4): p. 339 - 349.
- 830 JARVINEN, O., 1982. The acidification of precipitation in Finland. Luonnon Tutkija, 86(1): p. 7 - 10. (En finnois avec résumé en anglais).
- 1391 JARVINEN, O., A. PATILA, J. KAMARI, 1985. Temporal development of acid deposition at four observation stations in Finland in 1971-1982. Aqua Fenn. 15(1): p. 3 - 10.
- 97 JEFFRIES, D.S., C.M. COX, P.J. DILLON, 1979. Depression of pH in Lakes and Streams in Central Ontario during Snowmelt. Journal of the Fisheries Research Board of Canada 36 (6): p. 640 - 646.
- 1607 JEFFRIES, D.S., W.R. SNYDER, 1981. Variations in the chemical composition of the snowpack and associated meltwaters in central Ontario. Proceedings of the Eastern Snow Conference, 38 Annual Meeting, Syracuse, N.Y. June 4-5, 1981. p. 11 - 22.
- 551 JEFFRIES, D.S., W.R. SNYDER, 1981. Atmospheric Deposition of Heavy Metals in Central Ontario. Water, Air and Soil Pollution 15: p. 127 - 152.
- 550 JEFFRIES, D.S., W.R. SNYDER, W.A. SCHEIDER, M. KIRBY, 1977/78. Small-Scale Variations in Precipitation loading near Dorset, Ontario. Water Poll. Res. Canada 13: p 73 - 84.

(section 1. 5)

- 792 JICKELLS, T., A. KNAP, T. CHURCH, J. GALLOWAY, J. MILLER, 1982. Acid rain on Bermuda. Nature, 297(5861): p. 55 - 57.
- 1366 JOHANNES, A.E., E.R. ALTWICKER, N.L. CLESCERI, 1985. The integrated lake-watershed acidification study; atmospheric inputs. Water Air Soil Pollut. 26(4): p. 339 - 354.
- 71 JOHANNESSEN, M., A. HENRIKSEN, 1978. Chemistry of Snow Meltwater: Changes in Concentration During Melting. Water Resources Research 14 (4): p. 615 - 619.
- 1567 JOHANNESSEN, M., A. SKARTVEIT, R.F. WRIGHT, 1980. Streamwater chemistry before during and after snowmelt. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 224 - 225.
- 225 JOHANNESSEN, M., T. DALE, E.T. GJESSING, A. HENRIKSEN, R.F. WRIGHT, 1975. Acid Precipitation in Norway: the regional distribution of contaminants in snow and the chemical concentration processes during snowmelt. In: Isotopes et impuretés dans les neiges et glaces. Actes du Colloque de Grenoble, août / septembre 1975.
- 441 JOHNSON, A.H., 1979. Acidification of Headwater Streams in the New Jersey Pine Barrens. J. Environ. Qual., 8(3): p. 383 - 386.
- 140 JOHNSON, D.W., 1981. The natural acidity of some unpolluted waters in southeastern Alaska and potential impacts of acid rain. Water, Air and Soil Pollution 16(2): p. 243 - 252.
- 559 JOHNSON, N.M., C.T. DRISCOLL, J.S. EATON, G.E. LIKENS, W.H. McDOWELL. 1981. Acid rain. Dissolved aluminum and chemical weathering at the Hubbard Brook Experimental Forest, New-Hampshire. Geochimica et Cosmochemica Acta, 45(9): p. 1421 - 1437.
- 114 JOHNSON, N.M., R.C. REYNOLDS, G.E. LICKENS, 1972. Atmospheric Sulfur: Its Effects on the chemical weathering of New England. Science 177: p. 514 - 516.

(section 1. 5)

- 1611 JONES, H.G., 1987. Chemical dynamics of snowcover and snowmelt in a boreal forest. In: Seasonal snowcovers - physics, chemistry, hydrology. D. Reidel Publishing Company, H.G. Jones and W.J. Orville-Thomas (eds.). p. 531 - 574.
- 990 JONES, H.G., M. BISSON, 1983. Physical and chemical evolution of snowpacks on the canadian shield. (Winter 1979-1980). Conference presented at the XX11nd Congress of the International Association of Limnology. Lyon. August 21-28, 1983. 11 p.
- 230 JONES, H.G., M. OUELLET, D.F. BRAKKE, 1980. The Evolution of Acidity in Surface Waters of Laurentides Park (Quebec, Canada) Over a Period of 40 Years. Proceedings International Conference on ecological impact of acid precipitation, Sandefjord, Norway, 11 - 14 March 1980, 8 p.
- 1621 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1986. Aspects qualitatif du développement au bassin du lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 142 p.
- 970 JORANGER, E. ET AL., 1980. Air and rainfall chemistry in Finnmark Norway 1976-1979 natural base water chemistry and relationship to fishing in the Jerqul Norway, field research territory 1977. SNSF-project, IR 76/80. Norway. 161 p.
- 364 JOURNAULT-DUPONT C., 1979. Etude écologique de la région de Rouyn-Noranda. Conférence sur les contaminants dans l'environnement, Québec, 14-15 mai. 43 p.
- 1128 KAHL, J.S., S.A. NORTON, 1983. Metal input and Mobilization in two acid-stressed lake watersheds in Maine. Land and Water Resources Center, University of Maine at Orono. PB8320825 6. 70 p.
- 1006 KALLEND, A.S., 1983. Trends in the acidity of rain in Europe: a re-examination of European Atmospheric Chemistry Network data. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 108 - 113.

(section 1. 5)

- 767 KALLEND, A.S., A.R.W. MARSH, J.H. PICKLES, M.V. PROCTOR, 1983. Acidity of rain in Europe. Atmospheric Environment, 17(1): p. 127 - 137.
- 1342 KATZ, B.G., O.P. BRICKER, M.M. KENNEDY, 1985. Geochemical mass-balance relationships for selected ions in precipitation and stream water, Catoctin mountains, Maryland. Am. J. Sci. 285(10): p. 931 - 962.
- 1484 KAWAMURA, K., I.R. KAPLAN, 1986. Biogenic and anthropogenic organic compounds in rain and snow samples collected in southern California, USA. Atmospheric Environment 20(1): p. 115 - 124.
- 1082 KELLER, W., 1983. Spring pH and alkalinity depressions in lake superior tributaries. J. Great Lakes Res. 9(3): p. 425 - 429.
- 832 KELLOGG, W.W., R.D. CADLE, E.R. ALLEN, A.L. LAZRUS, E.A. MARTELL, 1972. The sulfur cycle. Science, 175(4022): p. 587 - 596.
- 686 KELLY, T.J., D.H. STEDMAN, 1980. Effect of urban sources on acid precipitation in the Western United States. Science 210: p. 1043.
- 271 KEREKES, J.J., 1980. Preliminary Characterization of three Lake Basins Receiving Acid Precipitation in Nova Scotia. Environment Canada, Canadian Wildlife Service, Halifax. 11 p.
- 532 KEREKES, J. G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1981. The Response of three Lake Basins to Acid Precipitation in Central Nova Scotia between June, 1979, and May, 1980. Environment Canada, Canadian Wildlife Service, Halifax, N.S. 14 p.
- 1117 KEREKES, J., G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1982. Characterization of three lake basins sensitive to acid precipitation in central Nova Scotia (June 1979 to may 1980). Int. Revue ges. Hydrobiol. 67(5): p. 679 - 694.
- 1367 KHEMANI, L.T., G.A. MOMIN, M.S. NAIK, P.S.P. RAO, R. KUMAR, B. MURTY, 1985. Impact of alkaline particulates on pH of rain water in India. Water, Air, and Soil Pollution 25(4): p. 365 - 376.

(section 1. 5)

- 80 KLOPPENBURG, J., 1978. Le mercure et autres métaux lourds dans les pluies de la région de la Baie James, déc. 1978. Centre d'ingénierie nordique de l'école polytechnique. Rapport de stage: 35 p.
- 1303 KOLTON-SHAPIRA, R., LAKRITZ, M. LURIA, 1984. Rainwater pH in the vicinity of Hadera power plant Israel, during the winter season of 1981/82. Atmospheric Environment 18(6): p. 1245 - 1248.
- 320 KRAMER, J.R., 1976. Geochemical and lithological factors in acid precipitation. USDA Forest Service Gen. Tech. Rep NE-23: p. 611 - 618.
- 50 KURTZ, J., W. A. SCHEIDER, 1980. Acidic Precipitation in southcentral Ontario: Analysis of Source Regions Using Air Parcel Trajectories. Ontario, Ministry of the Environment, 20 p.
- 418 LACHANCE, M., B. BOBEE, 1980. Impact des sources de SO<sub>2</sub> sur l'acidification des précipitations et étude régionale de l'influence des émissions de la fonderie de Noranda. Water Pollution Research in Canada (accepté pour publication). 28 p.
- 32 LACHANCE, M., B. BOBEE, 1978. Etude de la variabilité du pH des précipitations autour de Rouyn - Noranda. INRS-Eau, Rapport soumis au Bureau d'études des substances toxiques (BCST) des Services de protection de l'environnement du Québec 95: 74 p.
- 357 LACHANCE, M., G. MORIN, J.L. SASSEVILLE, 1977. Approche rationnelle à l'étude de la qualité des précipitations sur un bassin. Rapport no. 80 rédigé par INRS-EAU pour Environnement Canada. 118 p.
- 1112 LAZRUS, A.L., P.L. HAAGENSON, G.L. KOK, ET AL., 1983. Acidity in air and water in a case of warm frontal precipitation. Atmospheric Environment 17(3): p. 581 - 591.
- 740 LEE, J.J., D.E. WEBER, 1982. Effects of sulfuric acid rain on major cation and sulfate concentrations of water percolating through two model hardwood forests. J. Environ. Qual., 11(1): p. 57 - 64.
- 836 LEINONEN, L., H. LATTILA, 1982. Air pollutants at the background stations in Finland. Luonnon Tutkija 86(1): p. 27 - 32. (En finnois avec résumé en anglais).

(section 1. 5)

- 100 LELIEVRE, C., 1981. Les pluies acides: Point de vue québécois. Feuillelet météorologique 20(5): p. 62 - 72.
- 898 LEVINE, S.Z, S.E. SCHWARTZ, 1982. In-cloud and below-cloud scavenging of nitric acid vapor. Atmospheric Environment 16(7): p. 1725 - 1734.
- 1488 LEWIN, E.E., R.G. DE PENA, J.P. SHIMSHOCK, 1986. Atmospheric gaz and particle measurements at a rural northeastern USA site. Atmospheric Environment 20(1): p. 59 - 70.
- 911 LEWIS Jr., W.M., F.H. WEIBEZAHN, 1981. Acid rain and major seasonal variation of hydrogen ion loading in a tropical watershed. Acta Cienta Venezolana 32: p. 236 - 238.
- 411 LEWIS, J. E., B. HREBENYK, 1980. Variations des concentrations de pluies acides selon les cas de précipitations dans la région de Schefferville au Québec. Gouvernement du Québec, Ministère des richesses naturelles. Feuillelet météorologique 19(9): p. 147 - 158.
- 684 LEWIS, W.M. Jr., M.C. GRANT, 1980. Acid Precipitation in the Western United States. Science 207: p. 176 - 177.
- 1089 LIKENS, G.E., F.H. BORMANN, J.S. EATON, 1980. Variations in precipitation and streamwater chemistry at the Hubbard Brook Experimental Forest during 1964 to 1977. In: Effects of acid precipitation of Terrestrial ecosystems. T.C. Hutchinson and M. Havas (eds). p. 443 - 464.
- 286 LIKENS, G.E., T.J. BUTLER, 1981. Recent acidification of precipitation in North America. Atmospheric Environment 15(7): p. 1103 - 1109.
- 670 LILJESTRAND, H.M., J.J. MORGAN, 1978. Chemical composition of acid precipitation in Pasadena, California. Environmental Science and Technology 12(12): p. 1271 - 1273.
- 1115 LILJESTRAND, H.M., J.J. MORGAN, 1980. Modeling the chemical composition of acid rain in southern California. In: Polluted Rain. Toribara, T.Y., M.W. Miller, P.E. Morrow (eds.), Plenum Press, New-York, 1980. p. 109 - 123.

(section 1. 5)

- 337 LILJESTRAND, H.M., J.J. MORGAN, 1981. Spatial Variations of Acid Precipitation in Southern California. Environmental Science and Technology 15(3): p. 333 - 338.
- 856 LINDBERG, S.E., 1982. Factors influencing trace metal, sulfate and hydrogen ion concentrations in rain. Atmospheric Environment 16(7): p. 1701 - 1709.
- 200 LINDBERG, S.E., R.C. HARRISS, 1981. The role of atmospheric deposition in an Eastern U.S. deciduous forest. Water Air Soil Pollut. 16(1): p. 13 - 31.
- 914 LINDBERG, S.E., R.R. TURNER, D.S. SHRINER, D.D. HUFF, 1981. Atmospheric deposition of heavy metals and their interaction with acid precipitation in a north american deciduous forest. International conference on heavy metals in the environment, Amsterdam, September 1981. Edinburg, Scotland: CEP consultants Ltd, p. 306 - 309.
- 1490 LINDQVIST, F., 1985. Determination of ambient sulfuric-acid aerosol by gaz chromatography - photoionization detection after pre-concentration in a denuder. Atmospheric Environment 19(10): p. 1671 - 1680.
- 897 LOGAN, R.M., J.C. DERBY, L.C. DUNCAN, 1982. Acid precipitation and lake susceptibility in the central Washington cascades. Environ. Sci. Technol. 16(11): p. 771 - 775.
- 17 LUNDE, G., 1976. Long-Range Aerial Transmission of Organic Micropollutants. Ambio 5 (5-6): p. 207 - 208.
- 301 LUNDE, G., J. GETHER, N. GJOS, M.S. LANDE, 1976. Organic micropollutants in precipitation in Norway. SNSF-Project, Rapport 9/76, Oslo: 17 p.
- 118 MADSEN, B.C., 1981. Acid Rain at Kennedy Space Center, Florida: Recent Observations. Atmospheric Environment 15(5): p. 853 - 862.
- 884 MADSEN, B.C., 1982. An evaluation of sampling interval length on the chemical composition of wet-only deposition. Atmospheric Environment 16(10): p. 2515 - 2519.
- 1495 MAFIOLO, G., P. MASNIERE, 1985. The relationships between sulfur dioxide sulfate nitrogen oxides and nitrates at a semiurban site; the influence of rain. Pollut. Atmos. 27(106): p. 79 - 85.

(section 1. 5)

- 1103 MAHENDRAPPA, M.K., 1983. Chemical characteristics of precipitation and hydrogen input in throughfall and stemflow under some eastern Canadian forest stands. Can. J. For. Res. 13(5): p. 948 - 955.
- 1496 MAHENDRAPPA, M.K., 1985. Precipitation chemistry affected by differences in location of collection sites and storage methods. Atmospheric Environment 19(10): p. 1681 - 1684.
- 525 MARSH, A.R.W., 1978. Sulphur and Nitrogen Contributions to the Acidity of Rain. Atmospheric Environment 12: p. 401 - 406.
- 998 MARSH, A.R.W., 1983. Studies of the acidity and chemical composition of clouds. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 185 - 194.
- 345 MARTIN, A., 1979. A Survey of the Acidity of Rainwater over Large Areas of Great Britain. The Science of the Total Environment 13 (2): p. 119 - 130.
- 877 MARTIN, A., 1982. A short study of the influence of a valley on the composition of rainwater. Atmospheric Environment 16(4): p. 785 - 793.
- 1152 MARTIN, A., 1984. Sulphate and nitrate related to acidity in rainwater. Water, Air, and Soil Pollution 21(1 - 4): p. 271 - 277.
- 281 MASSE, C., D.M. WHELPDALE, 1980. Review of Precipitation Chemistry Data in the Province of Quebec. Environment Canada, Atmospheric Environment Service. Report AQRB-80-007-T, Downsview, Ontario. 27 p.
- 1405 MASTERS, J.M., R.A. JR GORSE, S.M. JAPAR, J.M. NORBECK, 1986. A characterization of the Detroit, Michigan, USA, wintertime aerosol. Water, Air, and Soil Pollution 27(3-4): p. 277 - 286.
- 414 MATHESON, D.H., 1974. Measurement of Atmospheric Inputs to the Great Lakes. Canada Centre for Inland Waters, Burlington, Ont.: 113 p.

(section 1. 5)

- 248      MAYER, R., B. ULRICH, 1977. Acidity of precipitation as influenced by the filtering of atmospheric sulphur and nitrogen compounds - its role in the element balance and effect on soil. Water, Air and Soil Pollution 7(3): p. 409 - 416.
- 772      McCOLL, J.G., L.K. MONETTE, D.S. BUSH, 1982. Chemical characteristics of wet and dry atmospheric fallout in northern California. Journal of Environmental Quality, 11(4): p. 585 - 590.
- 98        McFEE, W.W., J.M. KELLY, 1977. Air pollution: Impact on soils. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 203 - 207.
- 538      McLEAN, R.A.N., 1981. The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem. Implications for Control Strategies. Environmental Sciences Group, Domtar Research Centre, Senneville. 10 p.
- 617      McLEAN, R.A.N., G.H. TOMLINSON, 1981. Les pluies acides et leurs effets potentiels sur les forêts. Congrès de l'Association Forestière du Québec, 3 octobre 1981. 16 p.
- 773      MEIWES, K.J., P.K. KHANNA, 1981. Distribution and cycling of sulphur in the vegetation of two forest ecosystems in an acid rain environment. Plant and Soil, 60(3): p. 369 - 375.
- 1034     MESSER, J.J., 1983. Geochemically alkaline snowpack in northern Utah mountains in spring of 1982. Atmospheric Environment 17(5): p. 1051 - 1054.
- 741      MOLLITOR, A.V., D.J. RAYNAL, 1982. Acid precipitation and ionic movements in Adirondack forest soils. Soil Sci. Soc. Am. J. 46(1): p. 137 - 141.
- 1092     MOLLITOR, A.V., D.J. RAYNAL, 1983. Atmospheric deposition and ionic input in Adirondack forests. Journal of the Air Pollution Control Association 33(11): p. 1032 - 1035.
- 1153     MONTAGNINI, F., H.S. NEUFELD, C. UHL, 1984. Heavy metal concentrations in some non - vascular plants in an Amazonian rainforest. Water, Air, and Soil Pollution 21 (1 - 4): p. 317 - 321.

(section 1. 5)

- 138 MORLING, G., 1981. Effects of acidification on some lakes in Western Sweden. Vatten 37(1): p. 25 - 38.
- 847 MOSELLO, R., 1981. Chemical characteristics of fifty italian alpine lakes (Pennine-Lepontine Alps), with emphasis on the acidification problem. Memorie dell'Istituto Italiano di Idrobiologia "Dott. Marco De Marchi" 39: p. 99 - 118.
- 841 MOSELLO, R., G. TARTARI, 1983. Effets des précipitations acides sur les lacs subalpins et alpins. Bulletin de la Qualité des Eaux VIII(2): p. 96 - 100.
- 600 MOSS, M.R., 1975. Spatial Patterns of Precipitation Reaction. Environ. Pollution 8: p. 301 - 315.
- 844 MUNGER, J.W., 1982. Chemistry of atmospheric precipitation in the north-central United States: Influence of sulfate, nitrate, ammonia and calcareous soil particulates. Atmospheric Environment 16(7): p. 1633 - 1645.
- 879 MUNGER, J.W., S.J. EISENREICH, 1983. Continental-scale variations in precipitation chemistry. Environmental Science and Technology 17(1): p. 32A - 42A.
- 1319 MUNN, R.E., G.E. LIKENS, B. WEISMAN, J.W. HORNBECK, C.W. MARTIN, F.H. BORMANN, 1984. A meteorological analysis of the precipitation chemistry event samples at Hubbard Brook (N.H.). Atmospheric Environment 18(12): p. 2775 - 2779.
- 282 MUNN, R.E., H. RODHE, 1971. On the meteorological interpretation of the chemical composition of monthly precipitation samples. Tellus 23 (1): p. 1 - 13.
- 1176 MURGATROYD, A.L., 1983. Spatial variations in precipitation chemistry over natal, South Africa. South African Journal of Science 79(10): p. 408 - 410.
- 1050 MUSOLD, G., O. LINDQVIST, 1983. Correlations between meteorological data and water - soluble sulphur compounds in fine aerosols. Atmospheric Environment 17(7): p. 1253 - 1260.
- 1045 NAGAMOTO, C.T., F. PARUNGO, R. REINKING, R. PUESCHEL, T. GERISH, 1983. Acid clouds and precipitation in eastern Colorado. Atmospheric Environment 17(6): p. 1073 - 1082.

(section 1. 5)

- 774 NEUMANN - HAUF, G., G. HALBRITTER, 1982. Site and season specific variations of the atmospheric pollutant transport and deposition on the local and regional scale. The Science of the Total Environment, 23: p. 91 - 96.
- 407 NICHOLLS, K.H., C.M. COX, 1978. Atmospheric Nitrogen and Phosphorus Loading to Harp Lake, Ontario, Canada. Water Resources Research, 14(4): p. 589 - 592.
- 857 NICHOLSON, I.A., I.S. PATERSON, 1983. Aspects des précipitations acides par rapport à la végétation au Royaume-Uni. Bulletin de la Qualité des Eaux VIII(2): p. 60 - 67.
- 874 NILSSEN, J.P., 1982. La détection de l'acidification régionale des lacs et de ses causes. Eau du Québec 15(4): p. 335 - 341.
- 593 NISBET, I.C.T., 1975. Sulfates and Acidity in precipitation: Their Relationship to Emissions and Regional Transport of Sulfur Oxides. In: Air Quality and Stationary source emission control, ch. 7. Committee on Public Works, U.S. Senate Serv. No. 94-4: p. 276 - 312.
- 510 NORDO, J., 1976. Long Range Transport of Air Pollutants in Europe and Acid Precipitation in Norway. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 87 - 103.
- 218 NORDO, J., A. ELAISSEN, J. SALTBOONES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150.
- 247 NORTON, S.A., 1977. Changes in chemical processes in soils caused by acid precipitation. Water, Air and Soil Pollution 7(3): p. 389 - 400.
- 1579 NORWEGIAN INSTITUTE FOR WATER RESEARCH, 1985. Rain project. Norwegian Institute for Water Research, Oslo, Norway. 4 p.
- 768 NRIAGU, J.O., R.D. COKER, 1978. Isotopic composition of sulfur in precipitation within the Great Lakes basin. Tellus, 30(4): p. 365 - 375.

(section 1. 5)

- 197 NYBORG, M., J. CREPIN, D. HOCKING, J. BAKER, 1977. Effect of Sulphur Dioxide on Precipitation and on the Sulphur Content and Acidity of Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 439 - 448.
- 92 ODEN, S., 1972. The extent and effects of atmospheric pollution on soils. FAO Soils Bull. 16: p. 179 - 194.
- 592 ODEN, S., 1976. The acidity Problem - An Outline of Concepts. Water, Air, and Soil Pollution 6: p. 137 - 166.
- 423 ODEN, S., T. AHL, 1973. The Acidification of Scandinavian Waters. Fisheries Research Board of Canada, Translation Series no 2535: 32 p.
- 690 OGDEN, J.G. III, 1982. Seasonal mass balance of major ions in three small watersheds in a maritime environment. Water, Air and Soil Pollution 17(2): p. 119 - 130.
- 840 OKITA, T., 1983. Précipitations acides et phénomènes connexes au Japon. Bulletin de la Qualité des Eaux VIII(2): p. 101 - 108.
- 1236 ONO, A., M. YAMATO, M. YOSHIDA, 1983. Molecular state of sulfate aerosols in the remote Everest highlands. Tellus 35B(3): p. 197 - 205.
- 24 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. An Analysis of the Sudbury Environmental Study Network Precipitation Acidity Data June - September, 1978. 146 p.
- 776 OPPENHEIMER, M., 1983. The relationship of sulfur emissions to sulfate in precipitation. Atmospheric Environment, 17(3): p. 451 - 460.
- 1510 OPPENHEIMER, M., 1985. An analysis of the sulfur budget and interstate sulfur transport for Colorado, USA. Atmos. Environ. 19(9): p. 1439 - 1444.
- 1511 OPPENHEIMER, M., C.B. EPSTEIN, R.E. YUHNKE, 1985. Acid deposition smelter emissions and linearity issue in the western USA. Science (Washington, D.C.) 229(4716): p. 859 - 862.
- 1585 OUELLET, M., 1987. Reduction of airborne fluoride emissions from canadian aluminium smelters as revealed by snow chemistry. The Science of the Total Environment. Elsevier Science Publishers, Amsterdam, Netherlands. 66: p. 65 - 72.

(section 1. 5)

- 873 OUELLET, M., H.G. JONES, 1982. Evidence paléolimnologique de transport atmosphérique longue portée de polluants acidifiants et de métaux traces. Eau du Québec 15(4): p. 356 - 368.
- 212 OVERREIN, L.N., 1972. Sulphur Pollution Patterns Observed; Leaching of Calcium in Forest Soil Determined. Ambio 1: p. 145 - 147.
- 1515 PATRINOS, A.A.N., 1985. The impact of urban and industrial emissions on mesoscale precipitation quality. J. Air Pollut. Control Assoc. 35(7): p. 719 - 727.
- 729 PEARSON, M.J., M. PITCHFORD, R. SNELLING, 1979. Western energy sulfate / nitrate monitoring network, progress report. U.S Environmental Protection Agency, EPA - 600/7-79-074. 42 p.
- 1147 PELLETT, G.L., R. BUSTIN, R.C. HARRISS, 1984. Sequential sampling and variability of acid precipitation in Hampton, Virginia. Water, Air and Soil Pollution 21(1-4): p. 33 - 49.
- 936 PELLETT, G.L., D.I. SEBACHER, R.J. BENDURA, D.E. WORNOM, 1983. HCl in rocket exhaust clouds: atmospheric dispersion, acid aerosol characteristics, and acid rain deposition. Journal of the Air Pollution Control Association 33(4): p. 304 - 311.
- 839 PENA, J.A., R.G. De PENNA, V.C. BOWERSOX, J.F. TAKACS, 1982. SO<sub>2</sub> content in precipitation and its relationship with surface concentrations of SO<sub>2</sub> in the air. Atmospheric Environment 16(7): p. 1711 - 1715.
- 1118 PERSEKE, C., H.-W. GEORGII, E. ROHBOCK, 1981. Investigation of the regional distribution of wet deposition of pollutants. In: Physico-chemical behaviour of atmospheric pollutants. Proceedings of the Second European Symposium held in Varese, Italy, 29 September - 1 October 1981, D. Reidel Publishing Company, 1982. p. 410 - 417.
- 754 PETERS, N.E., R.A. SCHROEDER, D.E. TROUTMAN, 1982. Temporal Trends in the Acidity of Precipitation and Surface Waters of New York. United States Geological Survey Water-Supply Paper 2188. 35 p.

(section 1. 5)

- 631 POSSANZINI, M., D. BROCCO, A. CECINATO, 1980. Determination of strong acid in air-borne matter. Analytical Letters, 13(A17): p. 1541 - 1547.
- 1195 POSTEL, S., 1984. Les forêts dans un monde de combustibles fossiles. Etude numéro 58 de l'Institut de prospective mondiale (trad. de l'ang.: Forests in a fossil fuel world, Worldwatch Paper 58). 41 p.
- 1016 POWERS, C.F., D.L. RAMBO, 1981. The occurrence of acid precipitation on the west coast of the United States. Environmental Monitoring and Assessment 1: p. 93 - 105.
- 1247 PRATT, G.C., 1984. Source areas for chemical components in Minnesota rain. Water, Air and Soil Pollution 23(3): p. 339 - 348.
- 1111 PRATT, G.C., M. COSCIO, D.W. GARDNER, B.I. CHEVONE, S.V. KRUPA, 1983. An analysis of the chemical properties of rain in Minnesota. Atmospheric Environment 17(2): p. 347 - 355.
- 1166 PRATT, G.C., M.R. COSCIO, S.V. KRUPA, 1984. Regional rainfall chemistry in Minnesota and west central Wisconsin. Atmospheric Environment 18(1): p. 173 - 182.
- 416 PRESTON, E.M., R.A. LEWIS (eds), 1978. The Bioenvironmental Impact of a coal-fired power plant, Colstrip, Montana. EPA-600/3-78-021, Corvallis Environmental Research Lab., Oreg. (microfiches).
- 896 PUCKETT, L.J., 1982. Acid rain, air pollution and tree growth in southeastern New-York. Journal of Environmental Quality 11(3): p. 376 - 381.
- 1522 RAPAPORT, R.A., N.R. URBAN, P.D. CAPEL, J.E. BAKER, B.B. LOONEY, S.J. EISENREICH, E. GORHAM, 1985. New DDT inputs to North America atmospheric deposition. Chemosphere 14(9): p. 1167 - 1174.
- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.
- 173 RAYNOR, G.S., J.V. HAYES, 1981. Acidity and conductivity of precipitation on central Long Island, New York in relation to meteorological variables. Water Air Soil Pollut. 15(2): p. 229 - 245.

(section 1. 5)

- 855 RAYNOR, G.S., J.V. HAYES, 1982. Variation in chemical wet deposition with meteorological conditions. Atmospheric Environment 16(7): p. 1647 - 1656.
- 1523 REHCIGL, J.E., D.L. SPARKS, 1985. Effect of acid rain on the soil environment; a review. Commun. Soil Sci. Plant Anal. 16(7): p. 653 - 680.
- 852 REDA, M., G.R. CARMICHAEL, 1982. Non - isothermal effects on SO<sub>2</sub> absorption by water droplets : I. Model development. Atmospheric Environment, 16(1): p. 145 - 150.
- 853 REDA, M., G.R. CARMICHAEL, 1982. Non - isothermal effects on SO<sub>2</sub> absorption by water droplets: II. Results and discussion. Atmospheric Environment, 16(1): p. 151 - 159.
- 1524 REDDY, M.M., H.C. CLAASSEN, 1985. Estimates of average major ion concentrations in bulk precipitation at 2 high-altitude sites near the continental divide in southwestern Colorado, USA. Atmos. Environ. 19(7): p. 1199 - 1204.
- 1525 REGENS, J.L., R.W. RYCROFT, 1985. Perspective on acid deposition control; science, economics and policy-making. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 87 - 106.
- 1527 RENNER, E., U. RATZLAFF, W. ROLLE, 1985. A lagrangian multi-level model of transport, transformation and deposition of atmospheric sulfur dioxide and sulfate. Atmos. Environ. 19(8): p. 1351 - 1360.
- 187 REUSS, J.O., 1977. Chemical and Biological Relationships Relevant to the Effect of Acid Rainfall on the Soil-Plant System. Water, Air and Soil Pollution 7(4): p. 461 - 478.
- 922 RICHTER, D.D., D.W. JOHNSON, D.E. TODD, 1983. Atmospheric sulfur deposition, neutralization, and ion leaching in two deciduous forest ecosystems. J. Environ. Qual. 12(2): p. 263 - 270.
- 1004 RIDDER, T.B., A.J. FRANTZEN, 1983. Acid precipitation over the Netherlands. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 123 - 128.

(section 1. 5)

- 1528 RIGGAN, P.J., R.N. LOCKWOOD, E.N. LOPEZ, 1985. Deposition and processing of airborne nitrogen pollutants in mediterranean-type ecosystems of southern California, USA. Environ. Sci. Technol. 19(9): p. 781 - 789.
- 1625 ROBERGE, J., J. STEIN, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1984. Environnement Canada, Direction des eaux intérieures, Région du Québec. 34 p.
- 689 ROBINSON, J.W., H. GHANE, 1982. Occurrence of acid rain in Baton Rouge, Louisiana, Summer 1981. The role of the catalytic converter. J. Environ. Sci. Health A17(1): p. 129 - 136.
- 917 ROBINSON, J.W., H. GHANE, 1983. Continued studies of acid rain and its effects on the Baton Rouge area. Journal of Environmental Science and Health 18(2): p. 165 - 174.
- 997 ROMER, F.G., ET AL., 1983. Preliminary measurements from an aircraft into the chemical composition of clouds. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 195 - 203.
- 1530 ROMER, F.G., J.W. VILJEER, L. VAN DEN BELD, H.J. SLANGEWAL, P.A.A. VELDKAM, H.F.R. REIJNDERS, 1985. The chemical composition of cloud and rainwater; results of preliminary measurements from an aircraft. Atmos. Environ. 19(11): p. 1847 - 1858.
- 1001 RONNEAU, C., J.-P. HALLET, 1983. Heavy elements in acid rain. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 149 - 154.
- 1568 ROSENQVIST, I.T., P. JORGENSEN, H. RUESLATTEN, 1980. The importance of natural H<sup>+</sup> production for acidity in soil and water. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 240 - 241.
- 436 ROSENQVIST, T., 1978. Alternative Sources for Acidification of River Water in Norway. The Science of the Total Environment, 10: p. 39 - 49.

(section 1. 5)

- 169 RUTHERFORD, G.K., 1967. A preliminary study of the composition of precipitation in S.E. Ontario. Can. Jour. of Earth Sciences 4: p. 1151 - 1160.
- 1091 SAMSON, P.J., 1984. The meteorology of acid deposition: A specialty conference summary. Journal of the Air Pollution Control Association 34(1): p. 20 - 24.
- 620 SASSEVILLE, J.L., M. LACHANCE, 1981. Environmental management cognitive strategies: the case of acid rain of the Yamaska watershed in Quebec, Canada. Institut national de la recherche scientifique (INRS). 35 p.
- 1532 SAXENA, P., C. SEIGNEUR, A.K. POLLACK, 1986. A critical assessment of existing data-bases for acid deposition modeling studies. J. Air Pollut. Control Assoc. 36(1): p. 48 - 54.
- 168 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1979. Effects of Acidic Precipitation on Precambrian Freshwaters in Southern Ontario. Journal of Great Lakes Research 5 (1): p. 45 - 51.
- 541 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1980. Bulk Deposition in the Sudbury and Muskoka - Haliburton Areas of Ontario during the Shutdown of Inco ltd in Sudbury. Ontario Ministry of the Environment, Limnology and Toxicity Section, Rexdale, Ontario. 18 p.
- 272 SCHEIDER, W.A., W.R. SNYDER, B. CLARK, 1979. Deposition of nutrients and major ions by precipitation in south-central Ontario. Water, Air and Soil Pollution 12: p. 171 - 185.
- 278 SCHINDLER, D.W., R.W. NEWBURY, K.G. BEATY, P. CAMPBELL, 1976. Natural Water and Chemical Budgets for a Small Precambrian Lake Basin in Central Canada. J. Fish. Res. Board Can. 33: p. 2526 - 2543.
- 108 SCHOFIELD, C.L., 1977. Acid snow-Melt Effects on Water Quality and Fish Survival in Adirondack Mountains of New-York State. U.S. National Technocal Information Service. Completion Report, PB-277-801. 27 p.
- 372 SCHOFIELD, C.L., J.R. TROJNAR, 1980. Aluminum Toxicity to Brook Trout (Salvelinus fontinalis) in Acidified Waters. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23 1979. p. 341 - 366.

(section 1. 5)

- 571 SCHOFIELD, Jr., L.L., 1965. Water Quality in Relation to Survival of Brook Trout (Salvelinus fontinalis (Mitchill)). Transaction of the American Fisheries Society 94: p. 227 - 235.
- 885 SCOTT, B.C., 1982. Theoretical estimates of the scavenging coefficient for soluble aerosol particles as a function of precipitation type, rate and altitude. Atmospheric Environment 16(7): p. 1753 - 1762.
- 893 SCOTT, B.C., 1982. Predictions of in - cloud conversion rates of SO<sub>2</sub> to SO<sub>4</sub> based upon a simple chemical and kinematic storm model. Atmospheric Environment 16(7): p. 1735 - 1752.
- 1149 SEIP, H.M., S. RUSTAD, 1984. Variations in surface water pH with changes in sulphur deposition. Water, Air, and Soil Pollution 21(1-4): p. 217 - 223.
- 444 SEIP, H.M., A. TOLLAN, 1978. Acid Precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment, 10: p. 253 - 270.
- 290 SEIP, H.M., E.T. GJESSING, H. KAMBEN, 1979. Importance of the composition of the precipitation for the pH in runoff-experiments with artificial precipitation on partly soil-covered "mini-catchments". SNSF-Project, Rapport IR 47/76, Oslo. 34 p.
- 289 SEIP, H.M., G. ABRAHAMSEN, E.T. GJESSING, A. STUANES, 1979. Studies of soil-, precipitation - and run-off chemistry in six small natural plots ("mini-catchments"). SNSF-Project Rapport IR 46/76, Oslo, 62 p.
- 705 SEIP, H.M., G. ABRAHAMSEN, N. CHRISTOPHERSEN, E.T. GJESSING, A.O. STUANES, 1980. Snow and meltwater chemistry in minicatchments. SNSF-Project, report IR 53/80, Oslo. 51 p.
- 1537 SEKIGUCHI, K., H. HARA, A. UJIIYE, 1985. Contribution of nitrate in lowering pH of precipitation. Environ. Technol. Lett. 6(9): p. 391 - 394.
- 511 SEMB, A., 1976. Measurement of Acid Precipitation in Norway. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 119 - 129.

(section 1. 5)

- 291 SEMB, A., 1978. Deposition of trace elements from the atmosphere in Norway. SNSF-Project, Rapport FR-13/78, Oslo: 28 p.
- 780 SEQUEIRA, R., 1982. Acid rain: An assessment based on acidbase considerations. Journal of the Air Pollution Control Association, 32(3): p. 241 - 245.
- 644 SERGEANT, D.B., V. ZITKO, L.E. BURRIDGE, 1981. Sampling, analysis and data evaluation of precipitation at St-Andrews, New-Brunswick, Canada, 1978-80. Canadian Technical Report of Fisheries and Aquatic Sciences, (1023): 26 p.
- 584 SHARPE, W.E., E.S. YOUNG. 1981. The effects of acid precipitation on water quality in roof catchment-cistern water supplies. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 24 p.
- 115 SHAW, R.W., D.M. WHELPDALE, 1973. Sulphate Deposition by Precipitation into Lake Ontario. Water, Air, and Soil Pollution 2: p. 125 - 128.
- 915 SHEWCHUK, S.R., 1982. A precipitation study by event collection from Reindeer lake, Saskatchewan. Saskatoon: Saskatchewan Research Council, Technical report no. 135. 23 p.
- 599 SHIOMI, M.T., K.W. KUNTZ, 1973. Great Lakes Precipitation Chemistry: Part 1. Lake Ontario Basin. 16th Conf. Great Lakes Res. 1973, Internat. Assoc. Great Lakes Res.: p. 581 - 602.
- 618 SHRINER, D.S., 1980. Terrestrial vegetation air pollutant interactions: nongaseous pollutants, wet deposition. Proceedings of International Conference on air pollutants and their effects on terrestrial ecosystems. Banff, Alberta, May 10-17. 30 p.
- 489 SINGH, B., 1981. L'occurrence et la variation dans le temps de la pluie acide, Baie James, Nouveau - Québec. Feuillelet météorologique 20(1): p. 7 - 20.
- 890 SINGH, B., M. NOBERT, 1982. Variations spatio-temporelles des pluies acides par rapport aux conditions météorologiques. Eau du Québec 15(4): p. 352 - 355.

(section 1. 5)

- 1540 SISTERTSON, D.L., B.E. WURFEL, B.M. LESHT, 1985. Chemical differences between event and weekly precipitation samples in northeastern Illinois, USA. Atmos. Environ. 19(9): p. 1453 - 1470.
- 148 SKARTVEIT, A., 1981. Relationships between Precipitation Chemistry, Hydrology, and Runoff Acidity. Nordic Hydrology, 12(2): p. 65 - 80.
- 393 SKARTVEIT, A., Y.T. GJESSING, 1979. Chemical Budgets and Chemical Quality of Snow and Runoff During Spring Snowmelt. Nordic Hydrology, 10 (2-3): p. 141 - 154.
- 931 SLANINA, J., J.H. BAARD, W.L. SIJP, W.A.H. ASMAN, 1983. Tracing the sources of the chemical composition of precipitation by cluster analysis. Water, Air, and Soil Pollution 20(1): p. 41 - 45.
- 454 SLINN, S.A., W.G.N. SLINN. 1981. Modeling of atmospheric particulate deposition to natural waters. In: Atmospheric pollutants in natural waters, Ann Arbor Science Publishers, Michigan, ISBN 0-250-40369-2: p. 23-53.
- 978 SMITH, R.A., R.B. ALEXANDER, 1983. Evidence for acid - precipitation - induced trends in stream chemistry at hydrologic Bench-Mark stations. U.S. Geological Survey Circular 910. 12 p.
- 455 SODERLUND, R. 1981. Dry and wet deposition of nitrogen compounds. In: Terrestrial cycles; processes, ecosystem strategies and management impacts. Proceedings of an International Workshop, Osterfarnebo, Sweden. Sept. 16-22, 1979. Ecological Bulletins NFR, no 33. p. 123 - 130.
- 889 STAIRS, R., 1983. Acid rain: A little chemistry. Alternatives, 11(2): p. 39.
- 1623 STEIN, J., J. ROBERGE, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 12 p.
- 1572 STEINNES, E., 1984. Heavy metal pollution of natural surface soils due to long-distance atmospheric transport. In: Pollutants in porous media. Springer-Verlag, New-York. B. Yaron, G. Dagan, J. Goldshmid (eds.). p. 115 - 122.

(section 1. 5)

- 376 STENSLAND, G.J., 1980. Precipitation Chemistry Trends in the North - eastern United States. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23 1979: p. 87 - 108.
- 1146 STENSLAND, G.J., R.G. SEMONIN, 1982. Another interpretation of the pH trend in the United States. Bulletin American Meteorological Society, 63(11): p. 1277 - 1284.
- 491 STEVENSON, D.J. 1980. The lead content and acidity of Christchurch precipitation. New Zealand Journal of Science, 23(3); p. 311 - 312.
- 1277 STONER, J.H., A.S. GEE, K.R. WADE, 1984. The effects of acidification on the ecology of streams in the upper Tywi Catchment in West Wales. Environmental Pollution (Series A) 35(2): p. 125 - 157.
- 1413 STREETS, D.G., B.M. LESHT, J.D. SHANNON, T.D. VESELKA, 1985. Climatological variability. Environ. Sci. Technol. 19(10): p. 887 - 893.
- 1545 STUMM, W., K.J. IRGOLIC, A.E. MARTELL, 1985. Deposition of atmospheric and metal pollutants and their impact on freshwater environment; case studies in Switzerland. United States - Italy Joint Seminar Workshop, 1983. Environ. Inorg. Chem. p. 401 - 417.
- 748 SUAREZ, E.L., U.S. JONES, 1982. Atmospheric sulfur as related to acid precipitation and soil fertility. Soil Sci. Soc. AM. J. 46: p. 976 - 980.
- 842 SUMMERS, P.W., 1983. Sources, transport atmosphérique et dépôt acide: une perspective mondiale. Bulletin de la Qualité des Eaux VIII(2): p. 81 - 88.
- 601 SUMMERS, P.W., D.W. WHELPDALE, 1976. Acid Precipitation in Canada. Water, Air, and Soil Pollution 6: p. 447 - 455.
- 157 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District, I. pH, Calcium and the Distribution of Invertebrates in the River Duddon. Freshwater Biology, 3: p. 437 - 462.

(section 1. 5)

- 158 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District. III. Aspects of Water Chemistry in Brownrigg Well, Whelpside Ghyll. Freshwater Biology, 3: p. 561 - 568.
- 733 SUZUKI, K., 1982. Chemical changes of snow cover by melting. Jap. J. Limnol. 43(2): p. 102 - 112.
- 341 TALBOT, L., 1980. Réseau de collecte des précipitations, mise sur pied et mode de fonctionnement, 80-82. Environnement Québec, Service de la qualité des eaux: 14 p.
- 342 TALBOT, L., 1980. Observations récentes de la qualité des précipitations au Québec. Environnement - Québec, Bureau d'étude sur les substances toxiques: 87 p.
- 185 TAMM, C.O., E.B. COWLING, 1977. Acidic Precipitation and Forest Vegetation. Water, Air, and Soil Pollution 7(4): p. 503 - 511.
- 1032 TANI, B., S. SIEGEL, S.A. JOHNSON, R. KUMAR, 1983. X - Ray diffraction investigation of atmospheric aerosols in the 0.3 - 1.0  $\mu$ m aerodynamic size range. Atmospheric Environment 17(11): p. 2277 - 2283.
- 869 TARES, T., 1982. The acidification of soil and leaching of nutrients by acid precipitation. Luonnon Tutkija, 86(1): p. 33 - 38. (En finnois avec résumé en anglais)
- 883 THE MAP3S RAINE RESEARCH COMMUNITY, 1982. The MAP3S Raine precipitation chemistry network: Statistical overview for the period 1976-1980. Atmospheric Environment 16(7): p. 1603 - 1631.
- 1284 THOMPSON, M.E., M.B. HUTTON, 1984. Sulfate in lakes of eastern Canada: calculated yields compared with measured wet and dry deposition. Water, Air, and Soil Pollution 24: p. 77 - 83.
- 523 THOMPSON, M.E., M.B. HUTTON. 1982. Sulfate in lakes of eastern Canada: calculated atmospheric loads compared with measured wet deposition. National Water Research Institute, Burlington Ontario. 22 p.
- 851 THORNTON, J.D., S.J. EISENREICH, 1982. Impact of land-use on the acid and trace element composition of precipitation in the north central U.S. Atmospheric Environment 16(8): p. 1945 - 1955.

(section 1. 5)

- 85 THORNTON, J.D., S.J. EISENREICH, J.W. MUNGER, E. GORHAM. 1981. Trace metal and strong acid composition of rain and snow in Northern Minnesota. In: Atmospheric Pollutants in natural waters. Ann Arbor Science Publishers, Michigan, ISBN 0-250-40369-2. p. 261-284.
- 886 THORP, J.M., B.C. SCOTT, 1982. Preliminary calculations of average storm duration and seasonal precipitation rates for the northeast sector of the United States. Atmospheric Environment 16(7): p. 1763 - 1774.
- 494 TOMLINSON, G.H., 1981. Acid Rain and the Forest - The Effect of Aluminum and the German Experience. Domtar, Centre de recherche Senneville, Québec, projet no. 74-7124-13: 22 p.
- 736 TROUTMAN, D.E., N.E. PETERS, 1982. Deposition and transport of heavy metals in three lake basins affected by acid precipitation in the Adirondack mountains, New York. In: Energy and Environmental Chemistry, Acid Rain, Volume two, L.H. Keith (ed), Ann Arbor Science, Michigan, p. 33 - 89.
- 1010 ULRICH, B., 1983. Effects of acid deposition. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 31 - 41.
- 717 UNDERWOOD, J.K., 1981. Acidic precipitation in Nova Scotia. Nova Scotia Department of the Environment, Halifax, 17 p.
- 718 UNDERWOOD, J.K., 1982. Monitoring acid precipitation. Nova Scotia Department of the Environment, Halifax. 29 p.
- 710 UNITED STATES GOVERNMENT, 1981. Effects of Acid Rain. Hearing before the subcommittee on energy conservation and supply of the committee on energy and natural resources United States senate. Publication no. 96-126, Part 2, Washington. 121 p.
- 1281 UNSWORTH, M.H., 1984. Evaporation from forests in cloud enhances the effect of acid deposition. Nature 312: p. 262 - 265.
- 810 VAN BREEMEN, N., ET AL., 1982. Soil acidification from atmospheric ammonium sulphate in forest canopy throughfall. Nature, 299: p. 548 - 550.

(section 1. 5)

- 811 VAN COILLIE, R., D. BROUARD, M. LACHANCE, Y. VIGNEAULT, 1982. Effets physico-chimiques des précipitations acides sur quatre rivières à saumons. Eau du Québec, 15(4): p. 384 - 393.
- 381 VAN LOON, J.C., R.J. BEAMISH, 1977. Heavy - Metal Contamination by Atmospheric Fallout of Several Flin Flon Area Lakes and the Relation to Fish Populations. J. Fish. Res. Board Can., 34(7): p. 899 - 906.
- 378 VERMEULEN, A.J., 1980. The Acidic precipitation phenomenon. A Study of this phenomenon and of a relationship between the acid content of precipitation and the emission of sulfur dioxide and nitrogen oxides in the Netherlands. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23, 1979. p. 7 - 60.
- 977 VET, R.J., N.W. REID, 1982. A comprehensive evaluation and integration of selected wet deposition data from Canada and the U.S.A. Concord Scientific Corporation for the Canada - USA Memorandum of Intent Workgroup II. 155 p.
- 1383 VONG, R.J., T.V. LARSON, D.S. COVERT, A.P. WAGGONER, 1985. Measurement and modeling of western Washington USA precipitation chemistry. Water Air Soil Pollut. 26(1): p. 71 - 84.
- 734 WAINWRIGHT, M., S. SUPHARUNGSUN, K. KILLHAM, 1982. Effect of acid rain on the solubility of heavy metal oxides and fluorspar (CaF<sub>2</sub>) add to soil. The Science of the Total Environment 23-34: p. 85 - 90.
- 1415 WALDMAN, J.M., J.W. MUNGER, D.J. JACOB, M.R. HOFFMAN, 1985. Chemical characterization of stratus cloudwater and its role as a vector for pollutant depositon in a Los-Angeles, California, USA, pine forest. Tellus Ser. B Chem. Phys. Meteorol. 37(2): p. 91 - 108.
- 1552 WEATHERS, K.C., G.E.LIKENS, BORMANN, F.H., J.S. EATON, ET AL., 1986. A regional acidic cloud-fog water event in the eastern USA. Nature (Lond.) 319(6055): p. 657 - 658.
- 284 WEISS, R.E., A.P. WAGGONER, R.J. CHARLSON, N.C. AHLQUIST, 1977. Sulfate Aerosol: Its Geographical Extent in the Midwestern and Southern United States. Science 195: p. 979 - 981.

(section 1. 5)

- 1298 WESELEY, M.L., J.D. SHANNON, 1984. Improved estimates of sulfate dry deposition in eastern North America. Environmental Progress 3(2): p. 78 - 81.
- 1069 WESELY, M.L., D.R. COOK, R.L. HART, 1983. Fluxes of gases and particles above a deciduous forest in wintertime. Boundary-Layer Meteorology 27(3): p. 237 - 255.
- 1121 WESTERN AQUATICS INC., 1983. An assessment of the relationship among acidifying depositions, surface water acidification, and fish populations in North America. EPRI-EA-3127-Vol.1. Research project 1910-2. 169 p.
- 1385 WHARFE, A.J., P.A. JAMES, 1985. Atmospheric sulfur dioxide and rainwater at a coastal locality in N.W. England, UK. Water Air Soil Pollut. 25(3): p. 237 - 242.
- 330 WHELPDALE, D.M., 1976. Particulate Concentration and Dry Deposition Measurements. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 82 - 87.
- 861 WHELPDALE, D.M., 1983. Dépôts acides: répartition et incidences. Bulletin de la Qualité des Eaux VIII(2): p. 73 - 80.
- 747 WHELPDALE, D.M., L.A. BARRIE, 1982. Atmospheric monitoring network operations and results in Canada. Water, Air, and Soil Pollution 18: p. 7 - 23.
- 362 WHELPDALE, D.M., A.W. MACAFEE. 1979. Un bilan du soufre contenu dans l'atmosphère de l'Est canadien. Conférence sur les contaminants dans l'environnement, Québec, 14 - 15 mai. 22 p.
- 745 WILLIAMS, D.J., J.N. CARRAS, J.W. MILNE, 1981. The oxidation and long - range transport of sulphur dioxide in a remote region. Atmospheric Environment 15(10 - 11): p. 2255 - 2262.
- 1197 WILSON, E.E., L.A. BARRIE, 1981. Climatological study of acidic snowmelt shock potential for eastern Canada. Atmospheric Environment Service, Downsview, Ont. Proc. of the Eastern Snow conference, Syracuse, N.Y. June 4-5, 1981. p. 23 - 32.

(section 1. 5)

- 41 WILTSHIRE, J.F., 1979. The Long Range Transport of Atmospheric Acids; A Sulphur Budget for Nova Scotia. Service de la protection de l'environnement, Environnement Canada, Surveillance Report EPS-5-AR-79-8: 114 p.
- 326 WINCHESTER, J.W., 1976. Approaches to Evaluating Dry Deposition of Atmospheric Aerosol Pollutants Onto Lake Surfaces. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct 1, 1975: p. 33 - 41.
- 1005 WINKLER, P., 1983. Trend development of precipitation - pH in central Europe. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 114 - 122.
- 201 WINNER, W.E., J.D. BEWLEY, 1978. Contrasts between Bryophyte and Vascular Plant Synecological Responses in an SO<sub>2</sub> -Stressed White Spruce Association in Central Alberta. Oecologia 33(3): p. 311 - 325.
- 819 WISNIEWSKI, J., 1982. The potential acidity associated with dews, frosts and fogs. Water, Air and Soil Pollution, 17(4): p. 361 - 377.
- 950 WISNIEWSKI, J., E.L. KEITZ, 1983. Acid rain deposition patterns in the continental United States. Water, Air, and Soil Pollution 19: p. 327 - 339.
- 294 WRIGHT, R.F., H. DOVLAND, 1977. Regional surveys of the chemistry of the snowpack in Norway late Winter 1973, 1974, 1975 and 1976. SNSF - Project, Rapport FR 12/77, Oslo. 29 p.
- 72 WRIGHT, R.F., A. HENRIKSEN, 1978. Chemistry of Small Norwegian Lakes, With Special Reference to Acid Precipitation. Limnology Oceanography 23(3): p. 487 - 498.
- 304 WRIGHT, R.F., C. LYSHOLM, 1975. Regional survey of lakes in southern Norway, fall 1974. Preliminary analysis of water chemistry data, SNSF Project, Rapport IR 6/75, Oslo: 24 p.

(section 1. 5)

- 406 WRIGHT, R.F., E. SNEKVIK, 1978. Acid precipitation: Chemistry and fish populations in 100 lakes in southernmost Norway. International association of theoretical & applied limnology, 20: p. 765 - 775.
- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo. 467 p.
- 1559 YOUNG, J.W.S., R.W. SHAW, 1986. A proposed strategy for reducing sulfate deposition in North America: I. Methodology for minimizing sulfur removal. Atmos. Environ. 20(1): p. 189 - 200.
- 1154 YOUNG, Jr. E.S., W.E. SHARPE, 1984. Atmospheric deposition and roof-catchment cistern water quality. J. Environ. Qual. 13(1): p. 38 - 43.
- 818 ZAJAC, P.K., K. GRODZINSKA, 1982. Snow contamination by heavy metals and sulphur in Cracow agglomeration (southern Poland). Water Air and Soil Pollution, 17(3): p. 269 - 280.
- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.
- 703 ZIMMERMAN, A.P., H.H. HARVEY, 1979. Sensitivity to acidification of waters of Ontario and neighboring states. University of Toronto for Ontario Hydro. 136 p.

## 1. 6 Méthodes et techniques

- 899 ADEWUYI, Y.G., G.R. CARMICHAEL, 1982. A theoretical investigation of gaseous absorption by water droplets from SO<sub>2</sub> - HNO<sub>3</sub> - NH<sub>3</sub> - CO<sub>2</sub> - HCl mixtures. Atmospheric Environment 16(4): p. 719 - 729.
- 306 ALTWICKER, E.R., E. CHAPMAN, 1981. Mass transfer of sulfur dioxide into falling drops: a comparison of experimental data with absorption models. Atmospheric Environment 15(3): p. 297 - 300.
- 1426 ANDRESEN, J., K.T. PAW-U, 1985. Modeling of sulfur dioxide emissions and acidic precipitation at mesoscale distances. Journal of the Air Pollution Control Association, 36(11): p. 1159 - 1163.
- 123 ASKNE, C., C. BROSSET, 1972. Determination of strong acid in precipitation lake-water and air-borne matter. Atmospheric Environment 6: p. 695 - 696.
- 900 ASMAN, W.A.H., T.B. RIDDER, H.F.R. REIJNDERS, J. SLANINA, 1982. Influence and prevention of bird - droppings in precipitation chemistry experiments. Water, Air and Soil Pollution 17(4): p. 415 - 420.
- 1427 BADIN, E.J., G.C. FRAZIER, 1985. Sorbents for fluidized-bed combustion. Environmental Science and Technology 19(10): p. 894 - 901.
- 242 BAKER, M.B., D. CANIPAROLI, H. HARRISON, 1981. An analysis of the first year of multi state atmospheric power production pollution study rain chemistry measurements. Atmospheric Environment 15(1): p. 43 - 55.
- 269 BARRIE, L.A., 1981. The prediction of rain acidity and SO<sub>2</sub> scavenging in eastern North America. Atmospheric Environment 15(1): p. 31 - 41.
- 147 BARRIE, L.A., H.A. WIEBE, P. FELLIN, K. ANLAUF. 1978. The Canadian Air and Precipitation Monitoring Network: A Description and Results for November 1978 to June 1979. Report AQRB-80-002-T, Atmospheric Environment Service, Downsview, Ontario. 80 p.

(section 1. 6)

- 1285 BARRIE, L.A., K. ANLAUF, H.A. WIEBE, P.FELLIN, 1983. Acidic pollutants in air and precipitation at selected rural locations in Canada. Proc. Amer. Chem. Soc. Symp. on Acid Rain, March 1982, Las Vegas, Nev., J.I. Teasly (ed.), Ann Arbor Science. p. 15 - 35.
- 1043 BILONICK, R.A., 1983. Risk qualified maps of hydrogen ion concentration for the New York state area for 1966 - 1978. Atmospheric Environment 17(12): p. 2513 - 2524.
- 1193 BREITLAUCH, K-S., C.-Y. CHENG, 1982. Turbidimetric determination of sulfates in aqueous samples. Proceedings of the Pennsylvania Academy of Science 56(2): p. 184 - 186.
- 1436 CALVERT, J.G., A. LAZRUS, G.L. KOK, B.G. HEIKDES, J.G. WALEGA, J. LIND, C.A. CANTRELL, 1985. Chemical mechanisms of acid generation in the troposphere. Nature 317(6032): p. 27 - 39.
- 204 CANADA. ENVIRONNEMENT CANADA, 1980. Lignes directrices s'appliquant à l'indice de la qualité de l'air à court terme. Rapport du Comité fédéral - provincial de la pollution de l'air, 15 p.
- 522 CANADA. ENVIRONNEMENT CANADA, 1981. Technology for controlling emissions from power plants fired with fossil fuel. Environmental Protection Service, Report EPS 3-AP-81-3. 54 p.
- 1200 CANADA. ENVIRONNEMENT CANADA, 1984. Limitation des émissions atmosphériques polluantes: Véhicules légers. Rapport SPE 2/TS/4, Service de la protection de l'environnement. 42 p.
- 1203 CANADA. ENVIRONNEMENT CANADA, 1984. Emissions de véhicules légers et la question des oxydants au Canada. Rapport SPE 2/TS/3, Environnement Canada, Service de la protection de l'environnement. 16 p.
- 1437 CAPPELLANI, F., G. MELANDRONE, G. RESTELLI, 1985. Diode laser system for measurement of gaseous ammonia in ambient air. Environ. Monit. Assess. 5(3): p. 271 - 282.
- 1441 CARMICHAEL, G.R., L.K. PETERS, T. KITADA, 1986. A second generation model for regional-scale transport-chemistry deposition. Atmospheric Environment 20(1): p. 173 - 188.

(section 1. 6)

- 1290 CASE, J.W., 1984. Lichen biomonitoring networks in Alberta. Environmental Monitoring and Assessment 4: p. 303 - 313.
- 274 CASE, G.D., D.A. GREEN, G.W. STEWART, 1980. Aqueous Scrubber Reactions of Pyrrhotite (FeS) with Sulfur Dioxide. Environmental Science and Technology 14(7): p. 866 - 872.
- 1062 CHAN, W.H., F. TOMASSINI, B. LOESCHER, 1983. An evaluation of sorption properties of precipitation constituents on polyethylene surfaces. Atmospheric Environment 17(9): p. 1779 - 1785.
- 319 CHANG, S.G., R. TOOSI, T. NOVAKOV, 1981. The importance of soot particles and nitrous acid in oxidizing SO<sub>2</sub> in atmospheric aqueous droplets. Atmospheric Environment 15(7): p. 1287 - 1292.
- 693 CHARLSON, R.J., H. RODHE, 1982. Factors controlling the acidity of natural rainwater. Nature 295(5851): p. 683 - 685.
- 1251 COCKS, A.T., W.J. Mc ELROY, 1984. Modeling studies of the concurrent growth and neutralization of sulfuric acid aerosols under conditions in the human airways. Environmental Research 35(1): p. 79 - 96.
- 909 COSCIO, M.R., G.C. PRATT, S.V. KRUPA, 1982. An automatic, refrigerated, sequential precipitation sampler. Atmospheric Environment 16(8): p. 1939 - 1944.
- 297 DOVLAND, H., A. ELIASSEN, 1977. Estimates of dry deposition on snow. SNSF - Project, rapport IR 34/77, Oslo: 17 p.
- 1058 DRAXLER, R.R., 1983. Lagrangian meteorology and measurements of acidic precipitation at Washington, DC. Atmospheric Environment 17(12): p. 2525 - 2531.
- 821 DREWES, D.R., J.M. HALES, 1982. Smicka scavenging model incorporating chemical kinetics. Atmospheric Environment, 16(7): p. 1717 - 1724.
- 126 DURHAM, J.L., J.H. OVERTON, JR, V.P. ANEJA, 1981. Influence of Gaseous Nitric Acid on Sulfate Production and Acidity in Rain. Atmospheric Environment 15(6): p. 1059 - 1068.

(section 1. 6)

- 660 DURRAN, D.R., M.J. MELDGIN, M. LIU, 1979. A study of long range air pollution problems related to coal development in the northern great plains. Atmospheric Environment 13: p. 1021 - 1037.
- 285 ELIASSEN, A., 1980. A Review of Long - Range Transport Modeling. Journal of Applied Meteorology 19 (3): p. 231 - 240.
- 1615 ELLIS, J.H., 1988. Acid rain control strategies. Environ. Sci. Technol. 22(11): p. 1248 - 1255.
- 1455 ELLIS, J.H., E.A. MCBEAN, G.J. FARQUHAR, 1985. Chance-constrained-stochastic linear programming model for acid rain abatement. 1. Complete colinearity and noncolinearity. Atmospheric Environment 19(6): p. 925 - 938.
- 763 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2, 1982. Sur les sciences et analyses atmosphériques. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 174 p.
- 502 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 2. 1981. Modélisation de l'atmosphère. Rapport provisoire Etats-Unis - Canada, Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière, 170 p. (version anglaise disponible).
- 503 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3B. 1981. Evaluation des techniques, coûts et émissions. Rapport provisoire Etats - Unis - Canada, Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière, 189 p. (version anglaise disponible).
- 654 EVANS, L.S., 1979. A plant developmental system to measure the impact of pollutants in rain water. J. Air Pollut. Control Assoc. 29(11): p. 1145 - 1148.
- 825 FAUCHER, M., M. BISSON, 1982. Nouvelle méthodologie analytique pour caractériser chimiquement les précipitations acides. Eau du Québec, 15(4): p. 377 - 382.
- 1458 FAY, J.A., D. COLOMB, S. KAMAR, 1985. Source apportionment of wet sulfate deposition in eastern North America. Atmospheric Environment 19(11): p. 1773 - 1782.

(section 1. 6)

- 1030 FERREK, R.J., A.L. LAZRUS, J.W. WINCHESTER, 1983. Electron microscopy of acidic aerosols collected over the Northeastern United States. Atmospheric Environment 17(8): p. 1545 - 1561.
- 826 FISHER, B.E.A., 1982. The transport and removal of sulphur dioxide in a rain system. Atmospheric Environment, 16(4): p 775 - 783.
- 1031 FORTIN, M., E.A. McBEAN, 1983. A management model for acid rain abatement. Atmospheric Environment 17(11): p. 2331 - 2336.
- 329 GALLOWAY, J.N., 1976. Critical Factors in the Collection of Precipitation for Chemical Analysis. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 65 - 81.
- 659 GALLOWAY, J.N., B.J. COSBY, Jr., G.E. LIKENS, 1979. Acid precipitation: Measurement of pH and acidity. Limnology & Oceanography 24(6): p. 1161 - 1165.
- 325 GATZ, D.F., 1976. Wet Deposition Estimation Using Scavenging Ratios. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 21 - 32.
- 299 GETHER, J., G. LUNDE, J. MARKALI, 1976. Particulate material in atmospheric fallout and precipitation over the south of Norway. SNSF-Project, Rapport 7/76, Oslo: 15 p.
- 300 GETHER, J., N. GJOS, G. LUNDE, 1976. Isolation and characterisation in precipitation of organic micropollutants associated with long-range transport in air. SNSF-Project, Rapport 8/76, Oslo: 12 p.
- 1460 GIBIAN, G.P., 1985. Predicting deposition reductions using long-range transport models; some policy implications. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA, p. 137 - 172.

(section 1. 6)

- 1049 GOLDAN, P.D., W.C. KUSTER, D.L. ALBRITTON, F.C. FEHSENFELD, P.S. CONNELL, R.B. NORTON, B.J. HUEBERT, 1983. Calibration and tests of the filter - collection method for measuring clean-air, ambient levels of nitric acid. Atmospheric Environment 17(7): p. 1355 - 1364.
- 1019 GOLOMB, D., S. BATTERMAN, J. GRUHL, W. LABYS, 1983. Sensitivity analysis of the kinetics of acid rain models. Atmospheric Environment 17(3): p. 645 - 653.
- 1462 GORHAM, E., F.B. MARTIN, J.T. LITZAU, 1985. Acid rain; statistical analysis of ionic correlations questioned. Reply to comments. Science 228(4707): p. 1553.
- 295 GOTAAS, Y., 1977. Aircraft measurements of the deposition of sulphur dioxide to forest and to sea by the profile method. SNSF-Project, Rapport IR 30/77, Oslo: 22 p.
- 327 GRANAT, L., 1976. Principles in Network Design for Precipitation Chemistry Measurements. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 42 - 55.
- 1177 GRASSERBAUER, M., 1983. Micro and surface analysis for environmental studies. Mikrochimica Acta 3(5-6): p. 415 - 448.
- 1211 GRIMARD, Y., 1984. Réseau d'échantillonnage des précipitations du Québec - Analyse et évaluation des sites d'échantillonnage. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-12. 77 p.
- 805 HALES, J., 1982. Mechanistic analysis of precipitation scavenging using a one-dimensional, time-variant model. Atmospheric Environment, 16(7): p. 1775 - 1783.
- 854 HENDERSON, R.G., K. WEINGARTNER, 1982. Trajectory analysis of MAP3S precipitation chemistry data at Ithaca, N.Y. Atmospheric Environment 16(7): p. 1657 - 1665.
- 518 HICKS, B.B., J.D. SHANNON, 1979. A Method for Modeling the Deposition of Sulfur by Precipitation over Regional Scales. Journal of Applied Meteorology 18: p. 1415 - 1420.

(section 1. 6)

- 996 HOV, O., 1983. Model calculations of the effect of SO<sub>2</sub>, NO<sub>x</sub> or Hc emission changes on regional scale sulphate and nitrate production. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland p. 204 - 217.
- 1476 HWANG, H., P.K. DASGUPTA, 1985. Spectrophotometric determination of trace aqueous sulfate using barium-beryllon-II. Mikrochim. Acta 1(5-6): p. 313 - 324.
- 355 INCO LIMITED, 1980. The Containment of Sulphur Dioxide Emissions at Inco's Sudbury Operations. 9 p.
- 229 INTERAGENCY ENERGY/ENVIRONMENT RESEARCH AND DEVELOPMENT PROGRAM, 1979. Sulfur Oxides Control in Japan. EPA-600/9-79-043. 24 p.
- 287 IVERACH, D., 1978. A Technique for Estimating the Relative Impact of Mobile and Stationary Sources on NO<sub>2</sub> Concentrations. Journal of the Air Pollution Control Association 28 (8): p. 800 - 802.
- 367 JAHNIG, C.E., H. SHAW, 1981. A comparative Assessment of Flue Gas Treatment Processes. Part II - Environmental and Cost Comparison. J. Air Pollut. Control Assoc. 31(5): p. 596 - 604.
- 1303 KOLTON-SHAPIRA, R., LAKRITZ, M. LURIA, 1984. Rainwater pH in the vicinity of Hadera power plant Israel, during the winter season of 1981/82. Atmospheric Environment 18(6): p. 1245 - 1248.
- 50 KURTZ, J., W. A. SCHEIDER, 1980. Acidic Precipitation in southcentral Ontario: Analysis of Source Regions Using Air Parcel Trajectories. Ontario, Ministry of the Environment. 20 p.
- 32 LACHANCE, M., B. BOBEE. Etude de la variabilité du pH des précipitations autour de Rouyn - Noranda. INRS-Eau, Rapport soumis au Bureau d'études des substances toxiques (BCST) des Services de protection de l'environnement du Québec 95: 74 p.
- 357 LACHANCE, M., G. MORIN, J.L. SASSEVILLE, 1977. Approche rationnelle à l'étude de la qualité des précipitations sur un bassin. Rapport no. 80 rédigé par INRS-EAU pour Environnement Canada. 118 p.

(section 1. 6)

- 87 LEDBETTER, J.O., 1972. Variation of Pollutant Concentration with Sampling Time. Environmental Letters 3 (3): p. 159 - 169.
- 835 LEGRAND, M.R., A.J. ARISTARAIN, R.J. DELMAS, 1982. Acid titration of polar snow. Analytical Chemistry 54(8): p. 1336 - 1339.
- 100 LELIEVRE, C., 1981. Les pluies acides: Point de vue québécois. Feuillelet météorologique 20(5): p. 62 - 72.
- 539 LELIEVRE, C., 1981. Modèle simple du transport à longue distance des polluants atmosphériques. Environnement Québec: 9 p.
- 898 LEVINE, S.Z, S.E. SCHWARTZ, 1982. In-cloud and below-cloud scavenging of nitric acid vapor. Atmospheric Environment 16(7): p. 1725 - 1734.
- 1488 LEWIN, E.E., R.G. DE PENA, J.P. SHIMSHOCK, 1986. Atmospheric gaz and particle measurements at a rural northeastern USA site. Atmospheric Environment 20(1): p. 59 - 70.
- 1115 LILJESTRAND, H.M., J.J. MORGAN, 1980. Modeling the chemical composition of acid rain in southern California. In: Polluted Rain. Toribara, T.Y., M.W. Miller, P.E. Morrow (eds.), Plenum Press, New-York. 1980. p. 109 - 123.
- 1490 LINDQVIST, F., 1985. Determination of ambient sulfuric-acid aerosol by gaz chromatography - photo - ionization detection after pre-concentration in a denuder. Atmospheric Environment 19(10): p. 1671 - 1680.
- 1323 LIU, M.-K., R.E. MORRIS, J.P. KILLUS, 1984. Development of a regional oxidant model and application to the Northeastern United States. Atmospheric Environment 18(6): p. 1145 - 1161.
- 301 LUNDE, G., J. GETHER, N. GJOS, M.S. LANDE, 1976. Organic micropollutants in precipitation in Norway. SNSF-Project, Rapport 9/76, Oslo: 17 p.
- 1496 MAHENDRAPPA, M.K., 1985. Precipitation chemistry affected by differences in location of collection sites and storage methods. Atmospheric Environment 19(10): p. 1681 - 1684.

(section 1. 6)

- 1498 MARTIN, Y., 1985. Biogeochemical indication of environmental pollution with the aid of cryptogams. Eesti. Nsv. Tead Akad. Toim. Biol. 34(1): p. 1 - 15.
- 414 MATHESON, D.H., 1974. Measurement of Atmospheric Inputs to the Great Lakes. Canada Centre for Inland Waters, Burlington, Ont.: 113 p.
- 1142 McQUAKER, N.R., P.D. KLUCKNER, D.K. SANDBERG, 1983. Chemical analysis of acid precipitation: pH and acidity determinations. Environmental Science and Technology, 17(7): p. 431 - 435.
- 1207 MHG INTERNATIONAL LTD, 1983. Air pollution abatement study for petroleum refineries. DSS file no: 53SS. KE 145-2-0731, pour Environnement Canada, Service de la protection de l'environnement. 129 p.
- 1208 MHG INTERNATIONAL LTD, 1983. Study on petroleum fuel desulfurization in the petroleum industry. Volumes 1 and 2. DSS file 53SS. KE 145-2-0734, pour Environnement Canada, Service de la protection de l'environnement. 286 p.
- 282 MUNN, R.E., H. RODHE, 1971. On the meteorological interpretation of the chemical composition of monthly precipitation samples. Tellus 23 (1): p. 1 - 13.
- 324 MUNN, R.E., 1976. Atmospheric Transport and Diffusion on the Regional Scale. Proc. First Specialty Symposium on Atmospheric Contribution to the chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975 p. 1 - 20.
- 510 NORDO, J., 1976. Long Range Transport of Air Pollutants in Europe and Acid Precipitation in Norway. In: Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 87 - 103.
- 218 NORDO, J., A. ELAISSEN, J. SALT BONES, 1974. Large - Scale Transport of Air Pollutants. Advanced in Geophysics 18: p. 137 - 150.
- 1159 OIKAWA, K., H. SAITO, 1982. Ion chromatographic determination of anions in rainwater. Chemosphere 11(9): p. 933 - 941.

(section 1. 6)

- 25 ONTARIO. MINISTRY OF THE ENVIRONMENT. 1978. Acid Particulate and Particle Sizing Sampling at INCO Superstack, June 1977. Rapport no ARB-TDA53-78: 87 p.
- 1510 OPPENHEIMER, M., 1985. An analysis of the sulfur budget and interstate sulfur transport for Colorado, USA. Atmos. Environ. 19(9): p. 1439 - 1444.
- 678 PENKETT, S.A., 1981. The application of analytical techniques to the understanding of chemical processes occurring in the atmosphere. Toxicological and Environmental Chemistry, 3 (3-4): p. 291 - 321.
- 7 PERSSON, G.A., 1976. Control of Sulfur Dioxide Emissions in Europe. Ambio 5 (5 - 6): p. 249 - 252.
- 631 POSSANZINI, M., D. BROCCO, A. CECINATO, 1980. Determination of strong acid in air-borne matter. Analytical Letters, 13(A17): p. 1541 - 1547.
- 697 QUEBEC. MINISTERE DE L'ENVIRONNEMENT, 1982. Détermination des caractéristiques physico-chimiques des précipitations. Direction générale des inventaires et de la recherche, direction des laboratoires, PA-3. 85 p.
- 981 QUEBEC. MINISTERE DE L'ENVIRONNEMENT, 1982. Laboratory methods for determination of physico-chemical characteristics of precipitation. Direction générale des inventaires et de la recherche. Direction des laboratoires. PA-3A. 85 p.
- 1035 RAGLAND, K.W., K.E. WILKENING, 1983. Intermediate - range grid model for atmospheric sulfur dioxide and sulfate concentrations and depositions. Atmospheric Environment 17(5): p. 935 - 947.
- 852 REDA, M., G.R. CARMICHAEL, 1982. Non - isothermal effects on SO<sub>2</sub> absorption by water droplets: I. Model development. Atmospheric Environment, 16(1): p. 145 - 150.
- 1527 RENNER, E., U. RATZLAFF, W. ROLLE, 1985. A lagrangian multi-level model of transport, transformation and deposition of atmospheric sulfur dioxide and sulfate. Atmos. Environ. 19(8): p. 1351 - 1360.
- 187 REUSS, J.O., 1977. Chemical and Biological Relationships Relevant to the Effect of Acid Rainfall on the Soil-Plant System. Water, Air and Soil Pollution 7(4): p. 461 - 478.

(section 1. 6)

- 689 ROBINSON, J.W., H. GHANE, 1982. Occurrence of acid rain in Baton Rouge, Louisiana, Summer 1981. The role of the catalytic converter. J. Environ. Sci. Health A17(1): p. 129 - 136.
- 1530 ROMER, F.G., J.W. VILJEER, L. VAN DEN BELD, H.J. SLANGEWAL, P.A.A. VELDKAM, H.F.R. REIJNDERS, 1985. The chemical composition of cloud and rainwater; results of preliminary measurements from an aircraft. Atmos. Environ. 19(11): p. 1847 - 1858.
- 850 SAMANT, H.S., O.C. VAIDYA, 1982. Evaluation of the sampling buckets used in the Sangamo collector, type A for heavy metals in precipitation. Atmospheric Environment 16(9): p. 2183 - 2186.
- 1091 SAMSON, P.J., 1984. The meteorology of acid deposition: A specialty conference summary. Journal of the Air Pollution Control Association 34(1): p. 20 - 24.
- 620 SASSEVILLE, J.L., M. LACHANCE, 1981. Environmental management cognitive strategies: the case of acid rain of the Yamaska watershed in Quebec, Canada. Institut national de la recherche scientifique (INRS). 35 p.
- 1532 SAXENA, P., C. SEIGNEUR, A.K. POLLACK, 1986. A critical assessment of existing data-bases for acid deposition modeling studies. J. Air Pollut. Control Assoc. 36(1): p. 48 - 54.
- 885 SCOTT, B.C., 1982. Theoretical estimates of the scavenging coefficient for soluble aerosol particles as a function of precipitation type, rate and altitude. Atmospheric Environment 16(7): p. 1753 - 1762.
- 893 SCOTT, B.C., 1982. Predictions of in - cloud conversion rates of SO<sub>2</sub> to SO<sub>4</sub> based upon a simple chemical and kinematic storm model. Atmospheric Environment 16(7): p. 1735 - 1752.
- 1244 SEIGNEUR, C., P. SAXENA, 1984. A study of atmospheric acid formation in different environments. Atmospheric Environment 18(10): p. 2109 - 2124.
- 1536 SEIGNEUR, C., P. SAXENA, V.A. MIRAELLA, 1985. Diffusion and reaction of pollutants in stratus clouds; application to nocturnal acid formation in plumes. Environ. Sci. Technol. 19(9): p. 821 - 828.

(section 1. 6)

- 1539 SIEVERING, H., N. TON, 1985. A study of sulfate aerosol dry loading collection efficiency by passive samplers. J. Air Pollut. Control Assoc. 35(10): p. 1072 - 1074.
- 931 SLANINA, J., J.H. BAARD, W.L. SIJP, W.A.H. ASMAN, 1983. Tracing the sources of the chemical composition of precipitation by cluster analysis. Water, Air, and Soil Pollution 20(1): p. 41 - 45.
- 454 SLINN, S.A., W.G.N. SLINN. 1981. Modeling of atmospheric particulate deposition to natural waters. In: Atmospheric pollutants in natural waters, Ann Arbor Science Publishers, Michigan, ISBN 0-250-40369-2: p. 23-53.
- 848 STELSON, A.W., J.H. SEINFELD, 1982. Thermodynamic prediction of the water activity, NH<sub>4</sub> NO<sub>3</sub> dissociation constant, density and refractive index for the NH<sub>4</sub>NO<sub>3</sub>-(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O system at 25 °C. Atmospheric Environment 16(10): p. 2507 - 2514.
- 376 STENSLAND, G.J., 1980. Precipitation Chemistry Trends in the North - eastern United States. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21 - 23 1979: p. 87 - 108.
- 1544 STREETS, D.G., 1985. The design of cost-effective strategies to control acidic deposition. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (eds.). West View Press, Boulder, Colo., USA. p. 173 - 218.
- 1413 STREETS, D.G., B.M. LESHT, J.D. SHANNON, T.D. VESELKA, 1985. Climatological variability. Environ. Sci. Technol. 19(10): p. 887 - 893.
- 1547 SUTO, M., E.R. MANZANARES, L.C. LEE, 1985. Detection of sulfuric-acid aerosols by UV scattering. Environ. Sci. Technol. 19(9): p. 815 - 820.
- 929 SZEPESI, D.J., 1983. Sensitivity analysis on parameters of atmospheric sulfur transmission. The Science of the Total Environment 26(2): p. 183 - 202.
- 341 TALBOT, L., 1980. Réseau de collecte des précipitations, mise sur pied et mode de fonctionnement, 80-82. EnvironnementQuébec, Service de la qualité des eaux: 14 p.

(section 1. 6)

- 533 TALBOT, L., 1981. Réseau québécois de collecte des précipitations: conception, mise sur pied et mode de fonctionnement. Ministère de l'Environnement, Direction des inventaires et de la recherche, Service de la qualité des eaux. 37 p.
- 785 TANNER, R.L., P.H. DAUM, T.J. KELLY, 1983. New instrumentation for airborne acid rain research. International Journal of Environmental Analytical Chemistry, 13(4): p. 323 - 335.
- 253 TYREE, Jr, S.Y., 1981. Rainwater acidity measurement problems. Atmospheric Environment 15(1): p. 57 - 60.
- 718 UNDERWOOD, J.K., 1982. Monitoring acid precipitation. Nova Scotia Department of the Environment, Halifax. 29 p.
- 392 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1979. Sulfur Emission: Control technology and waste management. EPA-600/9-79-019: 32 p.
- 1550 VADJIC, V., M. GENTILIZZA, 1985. The effect of manganese dioxide and some manganese salts on the behavior of sulfur dioxide in the air investigated on model systems. Sci. Total Environ. 44(3): p. 245 - 252.
- 1383 VONG, R.J., T.V. LARSON, D.S. COVERT, A.P. WAGGONER, 1985. Measurement and modeling of western Washington USA precipitation chemistry. Water Air Soil Pollut. 26(1): p. 71 - 84.
- 1046 WALTERS, P.T., M.J. MOORE, A.H. WEBB, 1983. A separator for obtaining samples of cloud water in aircraft. Atmospheric Environment 17(6): p. 1083 - 1091.
- 1057 WANG, H.C., K.H. LEONG, J.J. STUKEL, P.K. HOPKE, 1983. The effects of thermophoresis and diffusiophoresis on the collection of charged sub -  $\mu$ m particles by charged droplets. Atmospheric Environment 17(12): p. 2533 - 2537.
- 1298 WESELEY, M.L., J.D. SHANNON, 1984. Improved estimates of sulfate dry deposition in eastern North America. Environmental Progress 3(2): p. 78 - 81.

(section 1. 6)

- 330 WHELPDALE, D.M., 1976. Particulate Concentration and Dry Deposition Measurements. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 82 - 87.
- 41 WILTSHIRE, J.F., 1979. The Long Range Transport of Atmospheric Acids; A Sulphur Budget for Nova Scotia. Service de la protection de l'environnement, Environnement Canada, Surveillance Report EPS-5-AR-79-8: 114 p.
- 326 WINCHESTER, J.W., 1976. Approaches to Evaluating Dry Deposition of Atmospheric Aerosol Pollutants Onto Lake Surfaces. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct 1, 1975: p. 33 - 41.
- 1559 YOUNG, J.W.S., R.W. SHAW, 1986. A proposed strategy for reducing sulfate deposition in North America: I. Methodology for minimizing sulfur removal. Atmos. Environ. 20(1): p. 189 - 200.

## CHAPITRE 2: ORGANISMES AQUATIQUES

### 2. 1 Ouvrages de synthèse

#### Cote

- 112 ALMER, B., W. DICKSON, C. EKSTROM, E. HORNSTROM, U. MILLER, 1974. Effects of acidification on swedish lakes. *Ambio*, 3(1): p. 30 - 36.
- 1287 BENNETT, B.G., 1985. Modeling exposure routes to man of trace metals associated with acid precipitation. *Environ. Health Perspect.* 63: p. 89 - 92.
- 219 CONROY, N, K. HAWLEY, W. KELLER, C. LAFRANCE, 1976. Influences of the atmosphere on lakes in the Sudbury area. *Journal of Great Lakes Research* 2: p. 146 - 165.
- 499 EILERS, J.M., R. BERG, G.E. GLASS, 1981. Sensitivity of aquatic organisms to acidic environments. U.S. Environmental Protection Agency, Environmental Research Laboratory-Duluth, Minnesota. 50 p.
- 399 ERIKSSON, M.O.G., L. HENRIKSON, B.I. NILSSON, G. NYMAN, H.G. OSCARSON, A.E. STENSON, 1980. Predator-prey Relations Important for the Biotic Changes in Acidified Lakes. *Ambio*, 9(5): p. 248 - 249.
- 19 FROMM, P.O., 1980. A review of some physiological and toxicological responses of freshwater fish to acid stress. *Env. Biol. Fish.* 5(1): p. 79 - 93.
- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 594 GORHAM, E., 1976. Acid Precipitation and its Influence Upon Aquatic Ecosystems - An Overview. *Water, Air, and Soil Pollution* 6: p. 457 - 481.
- 10 HENDREY, G.R., K. BAALSRUD, T.S. TRAAEN, M. LAAKE, G. RADDUM, 1976. Acid Precipitation: Some Hydrobiological Changes. *Ambio* 5 (5-6): p. 224 - 227.

(section 2. 1)

- 674 HENDREY, G.R., J.N. GALLOWAY, S.A. NORTON, C.L. SCHOFIELD, P.W. SHAFFER, D.A. BURNS, 1980. Geological and hydrochemical sensitivity of the eastern United States to acid precipitation. Brookhaven National Laboratory; Upton, N.Y.; U.S. Environmental Protection Agency, EPA-600/3-80-024. 90 p.
- 227 HENDREY, G.R., R.F. WRIGHT, 1975. Acid Precipitation in Norway: Effects on Aquatic Fauna. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of lake Waters. Intern. Assoc. Great Lakes Res. 28 sept. / 1 oct. 1975, Orillia, Ontario. p. 192 - 207.
- 1163 HULTBERG, H., 1983. Liming of acid-stressed ecosystems: Induced chemical and biological effects. VDI-Berichte 500: p. 409 - 414.
- 970 JORANGER, E. et al., 1980. Air and rainfall chemistry in Finnmark Norway 1976-1979 natural base water chemistry and relationship to fishing in the Jergul Norway, field research territory 1977. SNSF-project, IR 76/80. Norway. 161 p.
- 156 LEIVESTAD, H., G. HENDREY, I.P. MUNIZ, E. SNEKVIK, 1976. Effects of Acid Precipitation on Freshwater Organisms. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(Ed). Research Report 6/76, p. 87 - 111.
- 1562 MARMOREK, D.R., G. CUNNINGHAM, M.L. JONES, P. BUNNELL, 1984. Snowmelt effects related to acidic precipitation: a structured review of existing knowledge and current research activities. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 117 p.
- 1561 MARMOREK, D.R., K.W. THORNTON, J.P. BAKER, D.P. BERNARD, M.L. JONES, B.S. REUBER, 1986. Acidic episodes in surface waters: the state of science. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 243 p.
- 1125 MELACK, J.M., ET AL., 1983. Assessment of acidity of lakes and precipitation in the Sierra Nevada. Marine Science Institute, University of California. Technical Completion Report to U.S. Department of the Interior. PB83-25552 1. 36 p.

(section 2. 1)

- 874 NILSSEN, J.P., 1982. La détection de l'acidification régionale des lacs et de ses causes. Eau du Québec 15(4): p. 335 - 341.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 894 SALONEN, K., 1982. Biological effects of the acidification of waters. Luonnon Tutkija: p. 43 - 46. (En finnois avec un résumé en anglais).
- 1533 SCHINDLER, D.W., K.H. MILLS, D.F. MALLEY, D.L. FINDLAY, J.A. SHEARER, I.J. DAVIES, M.A. TURNER, G.A. LINSEY, D.R. CRUIKSHANK, 1985. Long-term ecosystem stress; the effects of years of experimental acidification on a small lake. Science (Washington, D.C.) 228(4706): p. 1395 - 1401.
- 613 SMITH, R.W., D.G. FREY, 1971. Acid mine pollution effects on lake biology. Indiana University for the Environmental Protection Agency. 132 p.
- 1381 STOKES, P.M., R.C. BAILEY, G.R. GROULX, 1985. Effects of acidification on metal availability to aquatic biota, with special reference to filamentous algae. Environ. Health Perspect. 63: p. 79 - 88.
- 696 SWEDEN. SWEDISH MINISTRY OF AGRICULTURE, 1982. Acidification today and tomorrow. Study prepared for the 1982 Stockholm Conference. 231 p.
- 1222 TONNESSEN, K.A., 1983. Potential for aquatic ecosystem acidification in the Sierra Nevada, California. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6) Hendrey G.R. (ed.). p. 147 - 169.
- 1384 WOOD, J.M., 1985. Effects of acidification on the mobility of metals and metalloids; an overview. Environ. Health Perspect. 63: p. 115 - 120.
- 78 WRIGHT, R.F., T. DALE, E.T. GJESSING, G.R. HENDREY, A. HENRIKSEN, M. JOHNNESSEN, I.P. MUNIZ, 1976. Impact of Acid Precipitation on Freshwater Ecosystems in Norway. Water, Air, and Soil Pollution, 6(2-4): p. 483 - 499.

## 2. 2 Microorganismes

- 303 ABRAHAMSEN, G., R. HORNTVEDT, B. TVEITE, 1975. Impacts of acid precipitation on coniferous forest ecosystems. SNSF-Project, Rapport 2/75, Oslo. 15 p.
- 1619 AHERN, A., S. CANTIN, G. VERREAULT, 1987. Etude de l'activité bactérienne et fongique de quatre rivières à saumons de la Côte-Nord du St-Laurent, en relation avec des conditions physico-chimiques acides. Pêches et Océans, Rapp. tech. can. sci. halieut. aquat. 1565: 30 p.
- 867 ARVOLA, L., M. RASK, 1982. Effects of acidification in a small forest lake. Luonnon Tutkija, 86(1): p. 46 - 49. (En finnois avec résumé en anglais)
- 520 BAATH, E., B. LUNDGREN, B. SODERSTROM, 1979. Effects of Artificial Acid Rain on Microbial Activity and Biomass. Bulletin of Environmental Contamination and Toxicology, 23 (6): p. 737 - 740.
- 947 BABICH, H., G. STOTZKY, 1982. Nickel Toxicity to microbes: effect of pH and implications for acid rain. Environmental Research 29(2): p. 335 - 350.
- 1231 BAKER, M.D., P.T.S. WONG, W.E. INNIS, C.I. MAYFIELD, 1981. Microbial activity in sediments from acidic Ontario lakes. Can. Tech. Rep. Fish. Aquat. Sci. 1151: p. 1 - 11.
- 194 BEWLEY, R.J.F., G. STOTZKY, 1983. Simulated acid rain (H<sub>2</sub>SO<sub>4</sub>) and microbial activity in soil. Soil. Biol. Biochem. 15(4): p. 425 - 429.
- 1164 BEWLEY, R.J.F., G. STOTZKY, 1983. Effects of combinations of simulated acid rain and cadmium or zinc on microbial activity in soil. Environmental Research 31(2): p. 332 - 339.
- 1096 BEWLEY, R.J.F., G. STOTZKY, 1983. Anionic constituents of acid rain and microbial activity in soil. Soil. Biol. Biochem. 15(4): p. 431 - 437.
- 339 BRYANT, R.D., E.A. GORDY, E.J. LAISHLEY, 1979. Effect of Soil Acidification on the Soil Microflora. Water, Air and Soil Pollution 11 (4): p. 437 - 445.

(section 2. 2)

- 1107 COLEMAN, D.C., 1983. The impacts of acid deposition on soil biota and C cycling. Environmental and Experimental Botany 23(2): p. 225 - 233.
- 1214 FRANCIS, A.J., H.L. QUINBY, G.R. HENDREY, 1983. Effect of lake pH on microbial decomposition of allochthonous litter. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V.6), Hendrey G.R. (ed.) p. 1 - 21.
- 1304 FURUTANI, A., J.W.M. RUDD, C.A. KELLY, 1984. A method for measuring the response of sediment microbial communities to environmental perturbations. Can. J. Microbiol. 30(11): p. 1408 - 1414.
- 144 GALLOWAY, J.N., 1977. Air pollution: Impact on aquatic ecosystems. Proc. of the 32nd Annual Meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 211 - 215.
- 124 GRAY, T.R.G., P. INESON, 1981. The effects of sulphur dioxide and acid rain on the decomposition of leaf litter. J. Sci. Food Agric. 32(6): p. 624 - 625.
- 544 HALL, R.J., G.E. LIKENS, S.B. FIANCE, G.R. HENDREY, 1980. Experimental Acidification of a stream in the Hubbard Brook experimental forest. New Hampshire Ecology 61(4): p. 976 - 989.
- 1331 HOENIGER, J.F.M., 1985. Microbial decomposition of cellulose in acidifying lakes of south-central Ontario, Canada. Appl. Environ. Microbiol. 50(2): p. 315 - 322.
- 305 HOVLAND, J., Y.Z. ISHAC, 1975. Effects of Simulated Acid Precipitation and Liming on Nitrification in Forest Soil. SNSF-Project, Rapport IR 14/75, Oslo: 15 p.
- 302 ISHAC, Y.Z., J. HOVLAND, 1976. Effects of simulated acid precipitation and liming on pine litter decomposition. SNSF-Project, Rapport IR 24/76, Oslo: 20 p.
- 1321 KELLY, C.A., J.W.M. RUDD, A. FURUTANI, D.W. SCHINDLER, 1984. Effects of lake acidification on rates of organic matter decomposition in sediments. Limnology and Oceanography 29(4): p. 687 - 694.

(section 2. 2)

- 921 KELLY, C.A., J.W.M. RUDD, R.B. COOK, D.W. SCHINDLER, 1982. The potential importance of bacterial processes in regulating rate of lake acidification. Limnology and Oceanography 27(5): p. 868 - 882.
- 317 KEYSER, H.H., D.N. MUNNS, J.S. HOHENBERG, 1979. Acid Tolerance of Rhizobia in Culture and in Symbiosis with Cowpea. Soil Science Society of America Journal 43(4): p. 719 - 722.
- 770 KILLHAM, K., M.K. FIRESTONE, 1982. Evaluation of accelerated H<sup>+</sup> applications in predicting soil chemical and microbial changes due to acid rain. Communications in Soil Science and Plant Analysis, 13(11): p. 995 - 1001.
- 945 KILLHAM, K., M.K. FIRESTONE, J.G. McCOLL, 1983. Acid rain and soil microbial activity: Effects and their mechanisms. J. Environ. Qual. 12(1): p. 133 - 137.
- 646 LACY, G.H., B.I. CHEVONE, N.P. CANNON, 1981. Effects of simulated acidic precipitation on erwinia-herbicola and pseudomonas-syringae populations. Phytopathology, 71(8): p. 888.
- 495 McMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.
- 640 MITCHELL, M.J., D.H. LANDERS, D.F. BRODOWSKI, 1981. Sulfur constituents of sediments and their relationship to lake acidification. Water, Air and Soil Pollution, 16(3): p. 351 - 359.
- 1280 RAO, S.S., A.A. JURKOVIC, J.O. NRIAGU, 1984. Bacterial activity in sediments of lakes receiving acid precipitation. Environ. Pollut. (Series A) 36(3): p. 195 - 205.
- 1015 RAO, S.S., B.J. DUTKA, 1983. Influence of acid precipitation on bacterial populations in lakes. Hydrobiologia 98: p. 153 - 157.
- 1273 RAO, S.S., D. PAOLINI, G.G. LEPPARD, 1984. Effects of low-pH stress on the morphology and activity of bacteria from lakes receiving acid precipitation. Hydrobiologia 114: p. 115 - 121.

(section 2. 2)

- 1526 REICH, P.B., A.W. SCHOETTLE, H.F. STROO, J. TROIANO, P.G. AMUNDSON, 1985. Effects of ozone, sulfur dioxide and acidic rain on mycorrhizal infection in northern red oak Quercus-rubra seedlings. Can. J. Bot. 63(11): p. 2049 - 2055.
- 315 SCHEIDER, W., J. ADAMSKI, M. PAYLOR, 1975. Reclamation of Acidified Lakes near Sudbury, Ontario. Ontario Ministry of the Environment: 129 p.
- 1538 SHAFER, S.R., R.I. BRUCK, A.S. HEAGLE, 1985. Influence of simulated acid rain on Phytophthora-cinnamoni and Phytophthora root rot of blue lupine. Phytopathology 75(9): p. 996 - 1003.
- 618 SHRINER, D.S., 1980. Terrestrial vegetation air pollutant interactions: nongaseous pollutants, wet deposition. Proceedings of International Conference on air pollutants and their effects on terrestrial ecosystems. Banff, Alberta, May 10-17. 30 p.
- 1543 STOPP, G.H. JR, 1984. Acidified precipitation and rhizobial nodulation on soybeans. J. Soil Biol. Ecol. 4(2): p. 132 - 133.
- 64 STRAYER, R.F., C.J. LIN, M. ALEXANDER. 1981. Effect of simulated acid rain on nitrification and nitrogen mineralization in forest soils. J. Environ. Qual., 10(4): p. 547 - 551.
- 1551 VAN BRUGGEN, A.H.C., J. OSMELOSKI, L. HELLER, J. JACOBSON, 1985. Effect of acidic precipitation on germination of Alternaria-solani and its infection efficiency on potato. Phytopathology 75(11): p. 1318.
- 1279 VAN LOON, G.W., 1983. Acid rain and soil. Can. J. Physiol. Pharmacol. 62(8): p. 991 - 997.

### 2. 3 Phytoplankton

- 241 ADAMSKI, J.M., M.F.P. MICHALSKI, 1975. Reclamation of acidified lakes Middle and Lohi, Sudbury, Ontario. Verhandlungen, Internationale Vereinigung fur Theoretische und Angewandte limnology 19: p. 1971 - 1983.
- 1354 ANIS, N.F., 1985. The effect of acid rain on the population density of algae in a miniature pond environment. Bulletin of the New-Jersey Academy of Science 30(2): p. 93.
- 1428 BANDY, J.T., 1985. Water characteristics. J. Water Pollut. Control Fed. 57(6): p. 494 - 497.
- 1143 CHANG, F.-H., M. ALEXANDER, 1983. Effect of simulated acid precipitation on algal fixation of nitrogen and carbon dioxide in forest soils. Environmental Science and Technology, 17(1): p. 11 - 13.
- 1301 COLLINS, T.M., P.A. LANE, 1984. Plankton of an acid-stressed lake (Kejimikujik National Parc, Nova Scotia, Canada). I. Design and water chemistry results of an enclosure experiment. Verh. Internat. Verein. Limnol. 22: p. 395 - 400.
- 152 CONROY, N., L. MAKI, 1974. Extensive and Intensive Lake Studies in the Sudbury Area. Ontario Industrial Waste Conference: p. 138 - 143.
- 139 CONROY, N., W. KELLER, 1976. Geological Factors Affecting Biological Activity in Precambrien Shield Lakes. Canadian Mineralogist 14: p. 62 - 72.
- 581 CONWAY, H.L., G.R. HENDREY. 1981. Ecological effects of acid precipitation on primary producers. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31-April 3, 1981. Michigan State University, Michigan. 22 p.
- 125 CRISMAN, T.L., P.L. BREZONIK, 1980. Acid Rain: Threat to Sensitive Aquatic Ecosystems. Proc. 73rd Annu. Meet.-Air Pollut. Control Assoc. June 22-27, 1980, Paper 80-24.3. 22 p.

(section 2. 3)

- 1449 DAVIS, R.B., D.S. ANDERSON, F. BERGE, 1985. Paleolimnological evidence that lake acidification is accompanied by loss of organic matter. Nature 316(6027): p. 436 - 438.
- 563 DEL PRETE, A., C. SCHOFIELD. 1981. The utility of diatom analyses of lake sediments for evaluating acid precipitation effects on dilute lakes. Arch. Hydrobiol., 91(3): p. 332 - 340.
- 1080 DELISLE, C.E., P. BILODEAU, L. ROY, P. ANDRE, 1983. Acidification artificielle en enclos limniques au lac Kempt: Résultats préliminaires. Sciences et Techniques de l'eau, 16(4): p. 367 - 369.
- 1076 DELISLE, E., G. BENOIT, L. ROY, P. BILODEAU, P. ANDRE, 1983. Heavy metals in acid precipitations and effects of simulated acidification on plankton. VDI-Berichte 500. p. 373 - 376.
- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 1357 DICKMAN, M.D., H.G. THODE, 1985. The rate of lake acidification in four lakes north of Lake Superior, Canada, USA, and its relationship to downcore sulfur isotope ratios. Water Air Soil Pollut. 26(3): p. 233 - 254.
- 405 DICKSON, W. 1978. Some effects of the acidification of Swedish lakes. International association of theoretical & applied limnology, 20: p. 851 - 856.
- 425 DILLON, P.J., N.D. YAN, W.A. SCHEIDER, N. CONROY, 1977. Acidic Lakes in Ontario: Characterization, Extent, and Responses to Base and Nutrient Additions. Ontario Ministry of the Environment. 39 p.
- 985 DUPUIS, S., E. LACOURSIERE, 1980. Inventaire sommaire du phytoplancton du lac Laflamme, du lac Tantaraie et de vingt-deux lacs du parc national de la Mauricie. Université du Québec à Trois-Rivières pour Environnement Canada, Direction générale des eaux intérieures, région du Québec. 25 p.

(section 2. 3)

- 1051 FERRONI, G.D., L.G. LEDUC, C.G. CHOQUET, 1983. Preliminary studies on the use of the heterotrophic activity method to evaluate acid-stress effects in aquatic environments. Water Research 17(10): p. 1379 - 1384.
- 535 FINDLAY, D.L., G. SAESURA, 1980. Effects on phytoplankton biomass, succession and composition in lake 223 as a result of lowering pH levels from 7,0 to 5,6. Data from 1974 to 1979. Pêches et Océans, Winnipeg. Canadian Manuscript Report of Fisheries & Aquatic Sciences 1585: 16 p.
- 1065 FLOWER, R.J., R.W. BATTARBEE, 1983. Diatom evidence for recent acidification of two Scottish lochs. Nature 305(5930): p. 130 - 133.
- 1087 FORTESCUE, J.A.C., M. DICKMAN, J. TERASMAE, 1982. The principle of successive approximations applied to an environmental geochemical study north of lake Superior. Trace Subst. Environ. Health, 16: p. 164 - 169.
- 544 HALL, R.J., G.E. LIKENS, S.B. FIANCE, G.R. HENDREY, 1980. Experimental Acidification of a stream in the Hubbard Brook experimental forest. New Hampshire Ecology 61(4): p. 976 - 989.
- 1126 HARTE, J., J. HOLDREN, K. TONNESSON, 1983. The potential for acid-precipitation damage to lakes of the Sierra Nevada, California. University of California, Ith, 16: p. 164 - 169.
- 1124 HENDREY, G.R., 1982. Acid precipitation effects on algal productivity and biomass in Adirondack lakes: A completion report. Center for Environmental research, Cornell University, Ithaca, N.Y. PB83-17320 3. 8 p.
- 1145 HENDREY, G.R., N.D. YAN, K.J. BAUMGARTNER, 1981. Responses of freshwater plants and invertebrates to acidification. In: Restoration of Lakes and Inland Waters. United States Environmental Protection Agency, Washington, D.C. EPA 440/5-81-010. p. 457 - 466.
- 1471 HOHAM, R.W., W.W. MOHN, 1985. The optimum pH of four strains of acidophilic snow algae in the genus Chloromonas chlorophyta and possible effects of acid precipitation. J. Phycol. 21(4): p. 603 - 609.

(section 2. 3)

- 1473 HORNSTROM, E., C. EKSTROM, M.C. DURAINI, 1984. Effects of pH and different levels of aluminum on lake plankton in the swedish west coast area. Inst. Freshwater Res. Drottningholm Rep. 61: p. 115 - 127.
- 1591 HOWELL, G., J.S.S. LAKSHMINARAYANA, 1986. The importance of water color in determining contemporary diatom assemblages and the implications on down-core pH reconstruction. Environment Canada, Inland Waters Directorate, Water Quality Branch, Moncton, N.B. 26 p.
- 1063 HUTTUNEN, P., J. MERILAINEN, 1983. Interpretation of lake quality from contemporary diatom assemblages. Hydrobiologia 103: p. 91 - 97.
- 639 JANSSON, M., H. OLSSON, O. BROBERG, 1981. Characterization of acid phosphatases in the acidified lake Gardsjon Sweden. Archiv Fuer Hydrobiologie, 92(3): p. 377 - 395.
- 202 KWIATKOWSKI, R.E., J.C. ROFF, 1976. Effects of Acidity on the Phytoplankton and Primary Productivity of Selected Northern Ontario Lakes. Canadian Journal of Botany 54: p. 2546 - 2561.
- 967 LANGLOIS, C., Y. VIGNEAULT, L. DESILETS, A. NADEAU, M. LACHANCE, 1983. Evaluation des effets de l'acidification sur la physico-chimie et la biologie des lacs du bouclier canadien (Québec). Rapp. techn. can. sci. halieut. aquat. 1233: 129 p.
- 725 MAGNAN, P., 1982. Etude de la sensibilité aux précipitations acides de 22 lacs du Parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 44 p.
- 1215 MARMOREK, D.R., 1983. Changes in the temporal behavior and size structure of plankton systems in acid lakes. In: Early biotic responses to advancing lake acidification. (Acid precipitation series; V. 6), Hendrey G.R. (ed.). p. 23 - 41.
- 495 McMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.
- 433 MICHALSKI, M.F.P., J. ADAMSKI, 1974. Restoration of Acidified Lakes, Middle and Lohi in the Sudbury Area. In: Ontario Industrial Wastes Conferences: p. 163 - 175.

(section 2. 3)

- 1345 NALEWAJKO, C., B. PAUL, 1985. Effects of manipulations of aluminum concentrations and pH on phosphate uptake and photosynthesis of planktonic communities in two precambrian shield lakes. Can. J. Fish. Aquat. Sci. 42(12): p. 1946 - 1953.
- 1506 NILSSEN, J.P., 1984. An ecological jigsaw puzzle reconstructing aquatic biogeography and pH in an acidified region. Inst. Freshwater Res. Drottningholm Rep. 61: p. 138 - 147.
- 1161 NORTON, D., R. DAVIS, F. BRAKKE, 1982. Responses of Northern New-England lakes to atmospheric inputs of acids and heavy metals. Orono, Maine: Land and Water resources Center, University of Maine at Orono, 2 microfiches.
- 232 OUELLET, M., M. DICKMAN, 1980. The Impact of Lake Acidification as Reflected by the Fossil Microbiota of Lac Laflamme, Quebec. INRS-Eau (Université du Québec): 6 p.
- 1513 PAERL, H.W., 1985. Enhancement of marine primary production by nitrogen-enriched acid rain. Nature (Lond.) 315(6022): p. 747 - 749.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 163 RODHE, W., 1981. Reviving Acidified Lakes. Ambio 10(4): p. 195 - 196.
- 1596 SANGFORS, O., 1988. Are synergistic effects of acidification and eutrophication causing excessive algal growth in Scandinavian coastal waters. Ambio 17(4): p. 296.
- 315 SCHEIDER, W., J. ADAMSKI, M. PAYLOR, 1975. Reclamation of Acidified Lakes near Sudbury, Ontario. Ontario Ministry of the Environment: 129 p.
- 422 SCHEIDER, W., P.J. DILLON, 1976. Neutralization and fertilization of Acidified lakes near Sudbury, Ontario. Proc. 11th Canadian Symp. Water Poll. Research Canada, 11: p. 93 - 100.

(section 2. 3)

- 548 SCHEIDER, W.A., J. JONES, B. CAVE, 1976. A Preliminary Report on the Neutralization of Nelson Lake near Sudbury, Ontario, 1976. Ontario Ministry of the Environment, Limnology and Toxicity Section, Water Resources Branch. 36 p.
- 957 SHEATH, R.G., M. HAVAS, J.A. HELLEBUST, T.C. HUTCHINSON, 1982. Effects of long-term natural acidification on the algal communities of tundra ponds at the Smoking Hills, N.W.T., Canada. Can. J. Bot. 60: p. 58 - 72.
- 1064 SMOL, J.P., D.F. CHARLES, D.R. WHITEHEAD, 1984. Mallomonadacean microfossils provide evidence of recent lake acidification. Nature 307(5952): p. 628 - 630.
- 1519 STEINBERG, C., H. HARTMANN, 1986. A biological paleoindicator for early lake acidification; Mallomonadacean chrysophyceae scale abundance in sediments. Naturwissenschaften 73(1): p. 37 - 39.
- 1216 STOKES, P.M., 1983. pH-related changes in attached algal communities of softwater lakes. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6) Hendrey G.R. (ed.). p. 43 - 61.
- 1381 STOKES, P.M., R.C. BAILEY, G.R. GROULX, 1985. Effects of acidification on metal availability to aquatic biota, with special reference to filamentous algae. Environ. Health Perspect. 63: p. 79 - 88.
- 1322 TEASE, B., R.A. COLER, 1984. The effect of mineral acids and aluminium from coal leachate on substrate periphyton composition and productivity. Journal of Freshwater Ecology 2(5): p. 459 - 467.
- 545 VAN DAM, H., G. SUURMOND, C.J.F. TERBRAAK. 1981. Impact of acidification on diatoms and chemistry of Dutch moorland pools. Hydrobiologia, 83(3): p. 425 - 459.
- 753 VAUGHAN, H.H., J.K. UNDERWOOD, J.G. OGDEN, III, 1982. Acidification of Nova Scotia lakes I: Response of diatom assemblages in the Halifax area. Water, Air, And Soil Pollution 18: p. 353 - 361.
- 1352 WEHR, J.D., L.M. BROWN, 1985. Selenium requirement of a bloom-forming planktonic alga from softwater and acidified lakes. Can. J. Fish. Aquat. Sci. 42(11): p. 1783 - 1788.

(section 2. 3)

- 166 WHITBY, L.M., P.M. STOKES, T.C. HUTCHINSON, G. MYSLIK, 1976. Ecological Consequence of Acidic and Heavy-Metal Discharges from the Sudbury Smelters. Canadian Mineralogist 14: p. 47 - 57.
- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo, 467 p.
- 549 YAN, N.D., 1979. Phytoplankton Community of an Acidified, Heavy Metal-Contaminated Lake near Sudbury, Ontario: 1973-1977. Water, Air and Soil Pollution 11: p. 43 - 55.
- 1226 YAN, N.D., C. LAFRANCE, 1984. Responses of acidic and neutralized lakes near Sudbury, Ontario, to nutrient enrichment. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15), J. Nriagu (ed.) p. 457 - 521.
- 1224 YAN, N.D., G.E. MILLER, 1984. Effects of deposition of acids and metals on chemistry and biology of lakes near Sudbury, Ontario. In: Environmental impacts of Smelters. (Advances in environmental science and technology, V. 15). J. Nriagu (ed.). p. 243 - 282.
- 149 YAN, N.D., P. STOKES, 1978. Phytoplankton of an Acidic Lake, and its Responses to Experimental Alterations of pH. Environmental Conservation 5 (2): p. 93 - 100.
- 160 YAN, N.D., P.M. STOKES, 1976. The Effect of pH on Lake Water Chemistry and Phytoplankton in a La Cloche Mountain Lake. Water Pollution Research Canada 11: p. 127 - 137.
- 449 YAN, N.D., R. STRUS, 1980. Crustacean Zooplankton Communities of Acidic, Metal-Contaminated Lakes Near Sudbury, Ontario. Can. J. Fish. Aquat. Sci. 37: p. 2282 - 2293.
- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.

## 2. 4 Macrophytes

- 581 CONWAY, H.L., G.R. HENDREY. 1981. Ecological effects of acid precipitation on primary producers. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 22 p.
- 1080 DELISLE, C.E., P. BILODEAU, L. ROY, P. ANDRE, 1983. Acidification artificielle en enclos limniques au lac Kempt: Résultats préliminaires. Sciences et Techniques de l'eau, 16(4): p. 367 - 369.
- 1076 DELISLE, E., G. BENOIT, L. ROY, P. BILODEAU, P. ANDRE, 1983. Heavy metals in acid precipitations and effects of simulated acidification on plankton. VDI-Berichte 500. p. 373 - 376.
- 1228 GORHAM, E., S.E. BAYLEY, D.W. SCHINDLER, 1984. Ecological effects of acid deposition upon peatlands: A neglected field in "acid-rain" research. Can. J. Fish. Aquat. Sci. 41(8): p. 1256 - 1268.
- 177 GORHAM, E., A.G. GORDON, 1963. Some Effects of Smelter Pollution upon Aquatic Vegetation near Sudbury, Ontario. Canadian Journal of Botany 41: p. 371 - 378.
- 186 GRAHN, O., 1977. Macrophyte Succession in Swedish Lakes Caused by Deposition of Airborne Acid Substances. Water, Air and Soil Pollution 7 (3): p. 295 - 305.
- 578 HARGREAVES, J.W., E.J.H. LLOYD, B.A. WHITTON, 1975. Chemistry and Vegetation of Highly Acidic Streams. Freshwat. Biol. 5: p. 563 - 576.
- 338 HULTBERG, H., O. GRAHN, 1976. Effects of acid Precipitation on Macrophytes in Oligotrophic Swedish Lakes. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 208 - 221.
- 956 KADONO, Y., 1982. Occurrence of aquatic macrophytes in relation to pH, alkalinity, Ca<sup>++</sup>, Cl<sup>-</sup>, and conductivity. Japanese Journal of Ecology 32(1): p. 39 - 44.

(section 2. 4)

- 1217 KENLAN, K.H., G.L. JACOBSON Jr., D.F. BRAKKE, 1983. Aquatic macrophytes and pH as controls of diversity for littoral cladocerans. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6). Hendrey G.R. (ed.) p. 63 - 84.
- 1215 MARMOREK, D.R., 1983. Changes in the temporal behavior and size structure of plankton systems in acid lakes. In: Early biotic responses to advancing lake acidification. (Acid precipitation series; V. 6). Hendrey G.R. (ed.). p. 23 - 41.
- 138 MORLING, G., 1981. Effects of acidification on some lakes in Western Sweden. Vatten 37(1): p. 25 - 38.
- 42 NICHOLS, Jr. L.E., F.J. Bulow, 1973. Effects of Acid Mine Drainage on the Stream Ecosystem of the East Fork of the Obey River, Tennessee. Journal of the Tennessee Academy of Science. 48(1): p. 30 - 39.
- 1102 ROELOFS, J.G.M., 1983. Impact of acidification and eutrophication on macrophyte communities in soft waters in the Netherlands. I. Field Observations. Aquatic Botany 17(2): p. 139 - 155.
- 94 SYLVESTRE, A., 1981. Interprétation des données physico-chimiques de 24 lacs du Sud du Québec étudiés dans le cadre du programme des précipitations acides du Service canadien de la faune. Environnement Canada, Service canadien de la faune, Région du Québec. 110 p.
- 623 WALLSTEN, M., 1981. Changes of lakes in Uppland Central Sweden during 40 years. Acta Universitatis Upsaliensis Symbolae Botanicae Upsalienses, 23(3): 83 p.
- 1390 YAN, N.D., G.E. MILLER, I. WILE, G.G. HITCHIN, 1985. Richness of aquatic macrophyte floras of soft water lakes of differing pH and trace metal content in Ontario, Canada. Aquat. Bot. 23(1): p. 27 - 40.

## 2. 5 Zooplankton

- 867 ARVOLA, L., M. RASK, 1982. Effects of acidification in a small forest lake. Luonnon Tutkija, 86(1): p. 46 - 49. (En finnois avec résumé en anglais)
- 609 BEAVER, J.R., T.L. CRISMAN, 1981. Acid precipitation and the response of ciliated protozoans in Florida lakes. Verh. Internat. Verein. Limnol., 21: p. 353 - 358.
- 1218 BRAKKE, D.F., R.B. DAVIS, K.H. KENLAN, 1983. Acidification and changes over time in the Chydorid Cladocera assemblage of New England lakes. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6) Hendrey G.R. (ed.). p. 85 - 104.
- 800 BUIKEMA, Jr. A.L., E.F. BENFIELD, B.R. NIEDERLEHNER, 1982. Effects of pollution on freshwater invertebrates. Journal of Water Pollution Control Federation, 54(6): p. 862 - 868.
- 992 CANFIELD, Jr, D.E., 1983. Sensitivity of Florida lakes to acidic precipitation. Water Resources Research 19(3): p. 833 - 839.
- 543 CARTER, J.C.H., 1971. Distribution and Abundance of planktonic Crustacea in ponds near Georgian Bay (Ontario, Canada) in relation to hydrography and water chemistry. Arch. Hydrobiol. 68(2): p. 204 - 231.
- 139 CONROY, N., W. KELLER, 1976. Geological Factors Affecting Biological Activity in Precambrian Shield Lakes. Canadian Mineralogist 14: p. 62 - 72.
- 125 CRISMAN, T.L., P.L. BREZONIK, 1980. Acid Rain: Threat to Sensitive Aquatic Ecosystems. Proc. 73rd Annu. Meet.-Air Pollut. Control Assoc. June 22-27, 1980, Paper 80-24.3. 22 p.
- 266 DE COSTA, J., A. JANICKI, 1978. Population dynamics and age structure of Bosmina longirostris in an acid Water impoundment. Verh. Internat. Verein. Limnol. 20: p. 2479 - 2483.
- 267 DE COSTA, J., 1975. The crustacean plankton of an acid reservoir. Verh. Internat. Verein. Limnol. 19: p. 1805 - 1813.

(section 2. 5)

- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 425 DILLON, P.J., N.D. YAN. W.A. SCHEIDER, N. CONROY, 1977. Acidic Lakes in Ontario: Characterization, Extent, and Responses to Base and Nutrient Additions. Ontario Ministry of the Environment. 39 p.
- 466 DODSON, S.I. 1982. Chemical and biological limnology of six west-central Colorado Mountain Ponds and their susceptibility to acid rain. The American Midland Naturalist, 107(1): p. 137 - 179.
- 827 FRANCE, R.L., 1982. Comment on Daphnia respiration in low pH water. Hydrobiologia, 94: p. 195 - 198.
- 828 FREY, D.G., 1982. The reticulated species of chydorus (cladocera chydoridae): Two new species with suggestions of convergence. Hydrobiologia, 93(3): p. 255 - 279.
- 143 GROTERUD, O., 1972. Zooplankton and Fish in relation to Acid Melt Water and Anaerobic Deep Water in a Lake. Vatten 4: p. 329 - 332.
- 88 HAGEN, A., A. LANGELAND, 1973. Polluted Snow in Southern Norway and the Effect of the Meltwater on Freshwater and Aquatic Organisms. Environmental Pollution 5: p. 45 - 57.
- 1126 HARTE, J., J. HOLDREN, K. TONNESSON, 1983. The potential for acid-precipitation damage to lakes of the Sierra Nevada, California. University of California, 16: p. 164 - 169.
- 1339 HAVAS, M., 1985. Aluminum bioaccumulation and toxicity to Daphnia magna in softwater at low pH. Can. J. Fish. Aquat. Sci. 42(11): p. 1741 - 1748.
- 1340 HAVAS, M., G.E. LIKENS, 1985. Toxicity of aluminum and hydrogen ions to Daphnia catawba, Holopedium gibberum, Chaoborus punctipennis and Chironomus anthracinus from Mirror Lake, New Hampshire, USA. Can. J. Zool. 63(5): p. 1114 - 1119.
- 794 HAVAS, M., T.C. HUTCHINSON, 1983. The Smoking Hills: natural acidification of an aquatic ecosystem. Nature, 301(5895): p. 23 - 27.

(section 2. 5)

- 1246 HAVAS, M., T.C. HUTCHINSON, G.E. LIKENS, 1984. Effect of low pH on sodium regulation in two species of Daphnia. Can. J. Zool. 62(10): p. 1965 - 1970.
- 1145 HENDREY, G.R., N.D. YAN, K.J. BAUMGARTNER, 1981. Responses of freshwater plants and invertebrates to acidification. In: Restoration of Lakes and Inland Waters. United States Environmental Protection Agency, Washington, D.C. EPA 440/5-81-010. p. 457 - 466.
- 1470 HENRIKSON, L., H.G. OSCARSON, J.A.E. STENSON, 1984. Development of the crustacean zooplankton community after lime treatment of the fishless lake Gardsjon, Sweden. Inst. Freshwater Res. Drottningholm Rep. 61: p. 104 - 114.
- 750 HENRIKSON, L., J.B. OLOFSSON, H.G. OSCARSON, 1982. The impact of acidification on chironomidae (diptera) as indicated by subfossil stratification. Hydrobiologia 86(3): p. 223 - 229.
- 968 HOBAEK, A., G.G. RADDUM, 1980. Zooplankton communities in acidified lakes in South Norway. SNSF project, IR 75/80, Norway. 132 p.
- 1473 HORNSTROM, E., C. EKSTROM, M.C. DURAINI, 1984. Effects of pH and different levels of aluminum on lake plankton in the swedish west coast area. Inst. Freshwater Res. Drottningholm Rep. 61: p. 115 - 127.
- 268 JANICKI, A., J. DE COSTA, 1979. A multivariate analysis of the crustacean plankton community of an acid reservoir. Arch. Hydrobiol. 85(4): p. 465 - 481.
- 1483 KAGAN, J., E.D. KAGAN, A.K. ISABELLE, P.A. KAGAN, S. QUIGLEY, 1985. The phytotoxicity of non-carcinogenic polycyclic aromatic hydrocarbons in aquatic organisms. Chemosphere 14(11-12): p. 1829 - 1834.
- 1248 KELLER, W., J.R. PITBLADO, 1984. Crustacean plankton in northeastern Ontario lakes subjected to acidic deposition. Water, Air and Soil Pollution 23(3): p. 271 - 291.
- 1217 KENLAN, K.H., G.L. JACOBSON Jr., D.F. BRAKKE, 1983. Aquatic macrophytes and pH as controls of diversity for littoral cladocerans. In: Early biotic responses to advancing lake acidification. (Acid precipitation series; V. 6) Hendrey G.R. (ed.). p. 63 - 84.

(section 2. 5)

- 495 MCMMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.
- 1406 MEINEL, V., U. MATTHIAS, S. ZIMMERMANN, 1985. Ecophysiological studies on acid tolerance of Gammarus-fossarum. Arch. Hydrobiol. 104(2): p. 287 - 302.
- 1506 NILSSEN, J.P., 1984. An ecological jig-saw puzzle reconstructing aquatic biogeography and pH in an acidified region. Inst. Freshwater Res. Drottningholm Rep. 61: p. 138 - 147.
- 45 PARENT, S., R.D. CHEETHAM, 1980. Effects of Acid Precipitation on Daphnia magna. Bull Environm. Contam. Toxicol. 25: p. 298 - 304.
- 512 PARSONS, J.D., 1976. Effects of Acid-Mine Wastes on Aquatic Ecosystems. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 571 - 595.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 751 RADDUM, G.G., O.A. SAETHER, 1981. Chironomid communities in Norwegian lakes with different degrees of acidification. Verh. Internat. Verein. Limnol. 21(1): p. 399 - 405.
- 1636 RODRIGUE, J., J.-L. DESGRANGES, 1988. Etude de la qualité du milieu aquatique et des composantes biologiques de 81 lacs à sauvagine du Québec méridional. Ministère de l'Environnement du Québec, Direction des relevés aquatiques. Rapport ENVIRODOQ 860061. 178 p.
- 315 SCHEIDER, W., J. ADAMSKI, M. PAYLOR, 1975. Reclamation of Acidified Lakes near Sudbury, Ontario. Ontario Ministry of the Environment: 129 p.
- 422 SCHEIDER, W., P.J. DILLON, 1976. Neutralization and fertilization of Acidified lakes near Sudbury, Ontario. Proc. 11th Canadian Symp. Water Poll. Research Canada, 11: p. 93 - 100.

(section 2. 5)

- 548 SCHEIDER, W.A., J. JONES, B. CAVE, 1976. A Preliminary Report on the Neutralization of Nelson Lake near Sudbury, Ontario, 1976. Ontario Ministry of the Environment, Limnology and Toxicity Section, Water Resources Branch. 36 p.
- 235 SPRULES, W.G., 1975. Midsummer Crustacean Zooplankton Communities in Acid-Stressed Lakes. J. Fish. Res. Board Can. 32(3): p. 389 - 395.
- 243 SPRULES, W.G., 1975. Factors affecting the structure of limnetic crustacean Zooplankton communities in central Ontario lakes. Verh. Internat. Verein. Limnol. 19: p. 635 - 643.
- 983 TOUSIGNANT, L., 1982. Le pH comme facteur affectant la structure des communautés de crustacés zooplanctoniques limnétiques dans 158 lacs du Québec. Ministère de l'Environnement du Québec, Direction des laboratoires, Rapport DL-1. 18 p.
- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo, 467 p.
- 1226 YAN, N.D., C. LAFRANCE, 1984. Responses of acidic and neutralized lakes near Sudbury, Ontario, to nutrient enrichment. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15), J. Nriagu (ed.). p. 457 - 521.
- 1224 YAN, N.D., G.E. MILLER, 1984. Effects of deposition of acids and metals on chemistry and biology of lakes near Sudbury, Ontario. In: Environmental impacts of Smelters. (Advances in environmental science and technology, V. 15), J. Nriagu (ed.). p. 243 - 282.
- 449 YAN, N.D., R. STRUS, 1980. Crustacean Zooplankton Communities of Acidic, Metal-Contaminated Lakes Near Sudbury, Ontario. Can. J. Fish. Aquat. Sci., 37: p. 2282 - 2293.

## 2. 6 Invertébrés

- 1081 ABRAHAMSEN, G., 1983. Effects of lime and artificial acid rain on the enchytraeid (Oligochaeta) fauna in coniferous forest. Holarctic Ecology 6(3): p. 247 - 254.
- 254 BELL, H.L., 1970. Effects of pH on the life cycle of the midge Tanytarsus Dissimilis. The Canadian Entomologist 102: p. 636 - 639.
- 800 BUIKEMA, Jr. A.L., E.F. BENFIELD, B.R. NIEDERLEHNER, 1982. Effects of pollution on freshwater invertebrates. Journal of Water Pollution Control Federation, 54(6): p. 862 - 868.
- 37 CARRITHERS, R.B., F.J. BULOW, 1973. An Ecological Survey of the West Fork of the Obey River, Tennessee with Emphasis on the Effects of Acid Mine Drainage. Journal of the Tennessee Academy of Science 48(2): p. 65 - 72.
- 1107 COLEMAN, D.C., 1983. The impacts of acid deposition on soil biota and C cycling. Environmental and Experimental Botany 23(2): p. 225 - 233.
- 152 CONROY, N., L. MAKI, 1974. Extensive and Intensive Lake Studies in the Sudbury Area. Ontario Industrial Waste Conference: p. 138 - 143.
- 125 CRISMAN, T.L., P.L. BREZONIK, 1980. Acid Rain: Threat to Sensitive Aquatic Ecosystems. Proc. 73rd Annu. Meet.-Air Pollut. Control Assoc. June 22-27, 1980, Paper 80-24.3. 22 p.
- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 1452 DERMOTT, R.M., 1985. Benthic fauna in a series of lakes displaying a gradient of pH. Hydrobiologia 128(1): p. 31 - 38.
- 1456 ENGBLOM, E., F.-E. LINGDELL, 1984. The mapping of short-term acidification with the help of biological indicators. Inst. Freshwater Res. Drottningholm Rep. 61: p. 60 - 68.

(section 2. 6)

- 382 FIANCE, S.B., 1978. Effects of pH on the biology and distribution of Ephemera funeralis (Ephemeroptera). Oikos, 31(3): p. 332 - 339.
- 144 GALLOWAY, J.N., 1977. Air Pollution: Impact on aquatic ecosystems. Proc. of the 32nd Annual Meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 211 - 215.
- 610 GROTERUD, O., 1981. The dynamics of acidification from a new view elucidated by studies in a lake area in Norway. Verh. Internat. Verein. Limnol., 21: p. 406 - 411.
- 88 HAGEN, A., A. LANGE LAND, 1973. Polluted snow in southern Norway and the effect of the meltwater on freshwater and aquatic organisms. Environmental Pollution 5: p. 45 - 57.
- 544 HALL, R.J., G.E. LIKENS, S.B. FIANCE, G.R. HENDREY, 1980. Experimental Acidification of a stream in the Hubbard Brook experimental forest. New Hampshire Ecology 61(4): p. 976 - 989.
- 517 HARP, G.L., R.S. CAMPBELL, 1967. The distribution of Tendipes plumosus (Linné) in mineral acid water. Limnology and Oceanography 12(4): p. 260 - 263.
- 652 HARRIMAN, R., B.R.S. MORRISON, 1982. Ecology of streams draining forested and non-forested catchments in an area of central Scotland subject to acid precipitation. Hydrobiologia, 88(3): p. 251 - 263.
- 1145 HENDREY, G.R., N.D. YAN, K.J. BAUMGARTNER, 1981. Responses of freshwater plants and invertebrates to acidification. In: Restoration of Lakes and Inland Waters, United States Environmental Protection Agency, Washington, D.C. EPA 440/5-81-010. p. 457 - 466.
- 1189 HESTHAGEN, T., 1982. A regional study on the environmental requirements of Gammarus lacustris G.O. Sars (Crustacea, Amphipoda) in Jotunheimen, Southern Norway. Fauna norv. Ser. A3. p. 26 - 30.
- 1327 HOLCOMBE, G.W., G.L. PHIPPS, J.W. MARIER, 1984. Methods for conducting snail (Aplexa hypnorum) embryo through adult exposures: effects of cadmium and reduced pH levels. Arch. Environ. Contam. Toxicol. 13(5): p. 627 - 634.

(section 2. 6)

- 97 JEFFRIES, D.S., C.M. COX, P.J. DILLON, 1979. Depression of pH in Lakes and Streams in Central Ontario during Snowmelt. Journal of the Fisheries Research Board of Canada 36 (6): p. 640 - 646.
- 1483 KAGAN, J., E.D. KAGAN, A.K. ISABELLE, P.A. KAGAN, S. QUIGLEY, 1985. The phytotoxicity of non-carcinogenic polycyclic aromatic hydrocarbons in aquatic organisms. Chemosphere 14(11-12): p. 1829 - 1834.
- 967 LANGLOIS, C., Y. VIGNEAULT, L. DESILETS, A. NADEAU, M. LACHANCE, 1983. Evaluation des effets de l'acidification sur la physico-chimie et la biologie des lacs du bouclier canadien (Québec). Rapp. techn. can. sci. halieut. aquat. 1233: 129 p.
- 1122 MITCHELL, M.J., 1982. Effect of atmospheric sulfur pollutants derived from acid precipitation on the benthic dynamics of lakes. State University of New York, Syracuse, N.Y. Final Report to Bureau of Reclamation, U.S. Department of the Interior, Washington. PB83-208322. 24 p.
- 880 MORGAN, D.O., B.R. McMAHON, 1981. Acid tolerance and effects of sublethal acid exposure on iono-regulation and acid-base status in two crayfish "procambarus clarki" and "orconectes rusticus". Journal of Experimental Biology 97: p. 241 - 252.
- 1072 NERO, R.W., D.W. SCHINDLER, 1983. Decline of Mysis relicta during the acidification of lake 223. Can. J. Fish. Aquat. Sci. 40(11): p. 1905 - 1911.
- 42 NICHOLS, Jr. L.E., F.J. Bulow, 1973. Effects of Acid Mine Drainage on the Stream Ecosystem of the East Fork of the Obey River, Tennessee. Journal of the Tennessee Academy of Science. 48(1): p. 30 - 39.
- 1505 NIKINMAA, M., T. JARVENPAA, K. WESTMAN, A. SOIVIO, 1983. Effects of hypoxia and acidification on the hemolymph pH values and ion concentrations in the freshwater crayfish Astacus-astacus. Finn. Fish. Res. 5: p. 17 - 22.
- 969 OKLAND, K.A., 1980. Ecology and distribution of Gammarus Lacustris in Norway including relation to acidification in lakes. SNSF-project, IR 67/80, Norway. 87 p.

(section 2. 6)

- 1232 OKLAND, K.A. J.G.J. KUIPER, 1982. Distribution of small mussels (Sphaeriidae) in Norway, with notes on their ecology. Malacologia 22(1-2): p. 469 - 477.
- 1508 OKLAND, K.A., J. OKLAND, 1985. Factor interaction influencing the distribution of freshwater shrimp gammarus. Oecologia 66(3): p. 364 - 367.
- 512 PARSONS, J.D., 1976. Effects of Acid-Mine Wastes on Aquatic Ecosystems. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 571 - 595.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 1277 STONER, J.H., A.S. GEE, K.R. WADE, 1984. The effects of acidification on the ecology of streams in the upper Tywi Catchment in West Wales. Environmental Pollution (Series A) 35(2): p. 125 - 157.
- 157 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District, I. pH, Calcium and the Distribution of Invertebrates in the River Duddon. Freshwater Biology, 3: p. 437 - 462.
- 158 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District. III. Aspects of Water Chemistry in Brownrigg Well, Whelpside Ghyll. Freshwater Biology, 3: p. 561 - 568.
- 570 TOMKIEWICZ, Jr., S.M., W.A. DUNSON, 1977. Aquatic Insect Diversity and Biomass in a Stream Marginally Polluted by Acid Strip Mine Drainage. Water Research 11: p. 397 - 402.
- 547 VANGENECHTEN, J.H.D., S. VAN PUYMBROECK, O.L.J. VANDERBORGHT, 1979. Effect of pH on the uptake of sodium in the waterbugs corixa dentipes (Thoms.) and corixa punctata (Illig.) (Hemiptera, Heteroptera). Comparative Biochemistry and Physiology 64A: p. 509 - 521.
- 394 WIEDERHOLM, T., L. ERIKSSON, 1977. Benthos of an Acid Lake. Oikos, 29: p. 261 - 267.

(section 2. 6)

- 449 YAN, N.D., R. STRUS, 1980. Crustacean Zooplankton Communities of Acidic, Metal-Contaminated Lakes Near Sudbury, Ontario. Can. J. Fish. Aquat. Sci., 37: p. 2282 - 2293.
- 817 ZISCHKE, J.A., ET AL., 1983. Acidification effects on macroinvertebrates and fathead minnows (Pimephales promelas) in outdoor experimental channels. Water Resources, 17(1): p. 47 - 63.

## 2. 7 Poissons

- 576 ADAMS, S.M., C.A.BURTIS, J.J.BEAUCHAMP, 1985. Integrated and individual biochemical responses of rainbow trout (Salmo gairdneri) to varying durations of acidification stress. Comp. Biochem. Physiol. C. Comp. Pharmacol. Toxicol. 82(2): p. 301 - 310.
- 1423 ANDERSEN, R., I.F. MUNIZ, J. SKURDAL, 1984. Effects of acidification on age class composition in arctic char Salvelinus-alpinus and brown trout Salmo-trutta in a coastal area southwest Norway. Inst. Freshwater Res. Drottningholm Rep. 61: p. 5 - 15.
- 1424 ANDERSSON, B., P. ANDERSSON, 1984. The distribution of trout Salmo-trutta in relation to pH - an inventory of small streams in Delsbo, Sweden. Inst. Freshwater Res. Drottningholm Rep. 61: p. 28 - 33.
- 1425 ANDERSSON, P., P. NYEERG, 1984. Experiments with brown trout Salmo-trutta during spring in mountain streams at low pH and elevated levels of iron, manganese and aluminium. Inst. Freshwater Res. Drottningholm Rep. 61: p. 34 - 47.
- 458 ARNOLD, D.E., R.W. LIGHT, V.J. DYMOND, 1980. Probable Effects of Acid Precipitation on Pennsylvania Waters. EPA-600/3 80-012, Corvallis Environmental Research Laboratory: 20 p.
- 331 BAKER, J.P., 1981. Aluminum toxicity to fish as related to acid precipitation and Adirondack surface water quality. Thesis presented to the faculty of the graduate school of Cornell University, Ithaca, N.Y., U.S.A. 461 p.
- 51 BAKSI, W.F., J. RICHARDS, G. CRAIG, J. REINKE, 1978. Suitability of Water Quality in two Reclaimed Lakes in the Sudbury Area for Maintaining Fish Populations. Technical Bulletin 6(78). Ontario, Ministry of the Environment, Limnology and Toxicity Section, 13 p.
- 90 BEAMISH, R.J., 1972. Lethal pH for the White Sucker Catostomus Commersoni (Lacépde). Trans-American Fisheries Society 101 (2): p. 335 - 358.

(section 2. 7)

- 383 BEAMISH, R.J., 1974. Growth and Survival of White Suckers (Catostomus commersoni) in an Acidified Lake. J. Fish, Res. Board Can., 31(1): p. 49 - 54.
- 259 BEAMISH, R.J., 1974. Loss of Fish Populations from Unexploited Remote Lakes in Ontario, Canada as a Consequence of Atmospheric Fallout of Acid. Water Research 8: p. 85 - 95.
- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 595 BEAMISH, R.J., H.H. HARVEY, 1972. Acidification of the La Cloche Mountain Lakes, Ontario, and Resulting Fish Mortalities. Journal Fisheries Research Board of Canada 29(8): p. 1131 - 1143.
- 111 BEAMISH, R.J., W.L. LOCKHART, J.C. VAN LOON, H.H. HARVEY, 1975. Long-Term Acidification of a Lake and Resulting Effects on Fishes. Ambio 4(2): p. 98 - 102.
- 534 BEAMISH, R.J., G.A. McFARLANE, J.C. VAN LOON, J. LICHWA, 1975. An Examination of the possible effects of Sudbury nickel mining and smelting operations on fishes and the water chemistry of lakes within the whitefish lake indian reserve. Environnement Canada, Service des Pêches et des Sciences de la mer. Rapport technique no 579. 52 p.
- 1578 BEGGS, G.L., J.M. GUNN, C.H. OLIVER, 1985. The sensitivity of Ontario lake trout (Salvelinus namaycush) and lake trout lakes to acidification. Ontario Ministry of Natural Resources, Fisheries Branch, Toronto, Ontario. 25 p.
- 1429 BEGGS, G.L., J.A. MACLEAN, J.G. GUNN, M.L. JONES, K. MINNS, 1985. The case for effects of acid deposition on Ontario Canada fisheries. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 49 - 61.
- 904 BOOTH, J.H., G.F. JANSZ, G.F. HOLETON, 1982. Cl<sup>-</sup>, K<sup>+</sup> and acid-base balance in rainbow trout during exposure to, and recovery from, sublethal environmental acidification. Canadian Journal of Zoology 60(5): p. 1123 - 1130.
- 1433 BRADLEY, R.W., J.B. SPRAGUE, 1985. Accumulation of zinc by rainbow trout as influenced by pH, water hardness and fish size. Environ. Toxicol. Chem. 4(5): p. 685 - 694.

(section 2. 7)

- 1420 BROUARD, D., M. LACHANCE. 1986. Effets des précipitations acides sur un sous-bassin versant de la rivière des Escoumins: réponse hydrochimique et biologique. Rapp. Tech. Can. Sci. Halieutiques et Aquat. 1452: 89 p.
- 905 BROWN, D.J.A., 1982. Influence of calcium on the survival of eggs and fry of brown trout (salmo trutta) at pH 4.5. Bulletin of Environmental Contamination and Toxicology 28(6): p. 664 - 668.
- 1180 BROWN, D.J.A., 1983. Effect of calcium and aluminum concentrations on the survival of brown trout (Salmo trutta) at low pH. Bull. Environ. Contam. Toxicol. 30(5): p. 582 - 587.
- 210 BROWN, D.J.A., S. LYNAM, 1981. The effect of sodium and calcium concentrations on the hatching of eggs and the survival of the yolk sac fry of brown trout, Salmo trutta L. at low pH. J. Fish Biol. 19(2): p. 205 - 211.
- 102 BROWN, D.J.A., K. SADLER, 1981. The chemistry and fishery status of acid lakes in Norway and their relationship to european sulphur emissions. Journal of Applied Ecology 18: p. 433 - 441.
- 279 CARRICK, T.R., 1979. The effect of acid water on the hatching of salmonid eggs. J. Fish. Biol. 14: p. 165 - 172.
- 577 CARRICK, T.R., 1981. Oxygen Consumption in the Fry of Brown Trout (Salmo Trutta L.) Related to pH of the Water. J. Fish Biol. 18: p. 73 - 80.
- 37 CARRITHERS, R.B., F.J. BULOW, 1973. An Ecological Survey of the West Fork of the Obey River, Tennessee with Emphasis on the Effects of Acid Mine Drainage. Journal of the Tennessee Academy of Science 48(2): p. 65 - 72.
- 1443 CHALANCHUK, S.M., 1985. Recruitment growth and condition of a population of the white sucker Catostomus-commersoni in lake 223, an experimentally acidified lake. Can. Tech. Rep. Fish. Aquat. Sci. 1396: p. I - IV, 1 - 18.
- 134 CHARETTE, J.-Y., 1981. L'impact des précipitations acides sur la faune ichtyenne du Québec. Texte de la conférence présentée à l'atelier sur la gestion de l'Ombre de fontaine. Duchesnay, Québec, le 18 novembre 1981. 37 p.

(section 2. 7)

- 135 CHARETTE, J.-Y., 1981. Observations préliminaires sur l'impact potentiel des précipitations acides sur la faune ichtyenne du parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures. Région du Québec. 17 p.
- 540 CHARETTE, J.-Y., M. LAGACE, 1981. Sommaire du résultat préliminaire des travaux sur l'impact des précipitations acides sur la faune piscicole du Québec (octobre 1980-janvier 1981). Gouvernement du Québec. 18 p.
- 1017 CHESTER, P.F., 1981. Acid rain, SO<sub>2</sub>, emissions and fisheries. IEEE Power Engineering Society. Special publication (20): p. 13 - 18.
- 1054 CHESTER, P.F., 1983. Acid rain, catchment characteristics and fishery status. Wat. Sci. Tech. 15(12): p. 47 - 58.
- 1335 CHEVALIER, G., L. GAUTHIER, G. MOREAU, 1985. Histopathological and electron microscopic studies of gills of brook trout, Salvelinus-fontinalis from acidified lakes. Can. J. Zool. 63(9): p. 2062 - 2070.
- 152 CONROY, N., L. MAKI, 1974. Extensive and Intensive Lake Studies in the Sudbury Area. Ontario Industrial Waste Conference: p. 138 - 143.
- 387 CRAIG, G.R., W.F. BAKSI, 1977. The effects of depressed pH on Flagfish reproduction, Growth and survival. Water Research, 11(8): p. 621 - 626.
- 125 CRISMAN, T.L., P.L. BREZONIK, 1980. Acid Rain: Threat to Sensitive Aquatic Ecosystems. Proc. 73rd Annu. Meet.-Air Pollut. Control Assoc. June 22-27, 1980, Paper 80-24.3. 22 p.
- 146 CRONAN, C.S., C.L. SCHOFIELD, 1979. Aluminum Leaching Response to Acid Precipitation: Effects on High - Elevation Watersheds in the Northeast. Science, 204: p. 304 - 306.
- 208 DAHL, K., 1927. The Effects of Acid Water on Trout Fry. Salmon and Trout Magazine 46: p. 35 - 43.
- 221 DAYE, P.G., 1980. Attempts to Acclimate Embryos and Alevins of Atlantic Salmon, (Salmo Salar), and Rainbow Trout, (S. Gairdneri), to low pH. Canadian Journal of Fisheries and Aquatic Sciences 37(6): p. 1035 - 1038.

(section 2. 7)

- 556 DAYE, P.G., 1980. Effects of Ambient pH on Fish: An Annotated Bibliography. Canadian Tech. Report of Fisheries and Aquatic Sciences no. 950, St-Andrews, N.B.: 28 p.
- 33 DAYE, P.G., E.T. GARSIDE, 1976. Histopathologic changes in surficial tissues of brook trout, *Salvelinus fontinalis* (Mitchill), exposed to acute and chronic levels of pH. Can. J. Zool. 54: p. 2140 - 2155.
- 246 DAYE, P.G., E.T. GARSIDE, 1977. Lower Lethal levels of pH for embryos and alevins of Atlantic salmon, (*Salmo salar* L.). Canadian Journal of Zoology 55(9): p. 1504 - 1508.
- 236 DAYE, P.G., E.T. GARSIDE, 1979. Development and Survival of embryos and Alevins of the Atlantic Salmon, (*Salmo salar* L.), continuously exposed to acidic levels of pH, from fertilization. Canadian Journal of Zoology 57(9): p. 1713 - 1718.
- 239 DAYE, P.G., E.T. GARSIDE, 1980. Structural Alterations in embryos and alevins of the Atlantic salmon, (*Salmo salar* L.), induced by continuous or short-term exposure to acidic levels of pH. Canadian Journal of Zoology 58(1): p. 27 - 43.
- 1450 DAYE, P.G., B.D. GLEBE, 1985. Fertilization success and sperm motility of atlantic salmon *Salmo-salar* in acidified waters. Samonid reproduction: An International Symposium, Iwamoto, R.N. and S. Sower (ed.), Meeting, Bellevue, Wash., USA, oct. 31-nov. 3, 1983, 7: 167 p.
- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 1638 DESGRANGES, J.-L., J. RODRIGUE, 1986. Influence of acidity and competition with fish on the development of ducklings in Quebec. Water, Air, and Soil Pollution 30(1986): p. 743 - 750.
- 405 DICKSON, W., 1978. Some effects of the acidification of Swedish lakes. International association of theoretical & applied limnology, 20: p. 851 - 856.

(section 2. 7)

- 1358 DRISCOLL, C.T., 1985. Aluminum in acidic surface waters chemistry transport and effects. Environ. Health Perspect. 63: p. 93 - 104.
- 233 DRISCOLL, Jr. C.T., J.P. BAKER, J.J. BISOGNI Jr., C.L. SCHOFIELD, 1980. Effect of Aluminium Speciation on Fish in Dilute Acidified Waters. Nature 284: p. 161 - 164.
- 687 DRYSDALE, C., 1980. The brook trout (Salvelinus fontinalis) and low environmental pH; A literature review and discussion. Canadian Wildlife Service, Kejimikujik National Park. 12 p.
- 796 DUPLINSKY, P.D., 1982. Sperm motility of northern pike and chain pickerel at various pH values. Transactions of the American Fisheries Society, 111(6): p. 768 - 771.
- 293 EDWARDS, D.J., S. HJELDNES, 1977. Growth and survival of salmonids in water of different pH. SNSF-Project, rapport FR 10/77, Oslo: 12 p.
- 1325 ELLGAARD, E.G., J.Y. GILMORE III, 1984. Effects of different acids on the bluegill sunfish, Lepomis macrochirus Rafinesque. J. Fish. Biol. 25(2): p. 133 - 137.
- 1337 ERICKSON, R.J., 1985. An evaluation of mathematical models for the effects of pH and temperature on ammonia toxicity to aquatic organisms. Water Resources 19(8): p. 1047 - 1058.
- 260 FALK, D.L., W.A. DUNSON.1977. The effects of season and acute sub-lethal exposure on survival times of brook trout at low pH. Water Research 11: p. 13 - 15.
- 1170 FAVA, J.A., R.M. KAPP, W.J. RUE Jr., 1982. Evaluation of ammonia toxicity in site-specific environmental assessments. Proceedings of the 4th annual meeting of the international society of petroleum industry biologists. Denver, Colo., U.S.A. Sept. 22-25, 1981. Rand, P.J. (ed.). Butterworths, Ltd. p. 319 - 337.
- 829 FRASER, G.A., H.H. HARVEY, 1982. Elemental composition of bone from white sucker (Catostomus commersoni) in relation to lake acidification. Canadian Journal of Fisheries and Aquatic Sciences, 39(9): p. 1289 - 1296.

(section 2. 7)

- 1181 FREEMAN, H.C., G.B. SANGALANG, G. BURNS, M. McMENEMY, 1983. The blood sex hormone levels in sexually mature male Atlantic salmon (Salmo salar) in the Westfield river (pH 4.7) and the Medway river (pH 5.6), Nova Scotia. The Science of the Total Environment 32(1): p. 87 - 91.
- 19 FROMM, P.O., 1980. A review of some physiological and toxicological responses of freshwater fish to acid stress. Env. Biol. Fish. 5(1): p. 79 - 93.
- 144 GALLOWAY, J.N., 1977. Air Pollution: Impact on aquatic ecosystems. Proc. of the 32nd Annual Meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 211 - 215.
- 1402 GARNETT, C.R., 1985. Research in fisheries contaminants and toxicology conducted by the Fisheries and environmental sciences division, Fisheries research branch, Scotia-Fundy region, Canada in 1984. Can. Manusc. Rep. Fish. Aquat. Sci. 1800: p. I - IV, 1 - 38.
- 564 GJEDREM, T, 1976. Genetic variation in tolerance of brown trout to acid water. SNSF-project, Research Report 5/76, Oslo: 11 p.
- 588 GJESSING, E.T. 1981. The effect of aquatic humus on the biological availability of cadmium. Arch. Hydrobiol., 91(2): p. 144 - 149.
- 155 GJESSING, E.T., A. HENRIKSEN, M. JOHANNESSEN, R. WRIGHT, 1976. Effects of Acid Precipitation on Freshwater Chemistry. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(Ed). Research Report 6/76. p. 65 - 85.
- 409 GRANDE, M., S. ANDERSEN, 1979. Toxicity of Acid Snowmelt Water to Brown Trout (Salmo trutta L.). Vatten, 1: p. 27 - 32.
- 569 GRANDE, M., S. ANDERSEN. 1981. Lethal levels of pH for Atlantic salmon. Vatten, 37(2): p. 109 - 114.
- 527 GRANDE, M., I.P. MUNIZ, S. ANDERSEN, 1978. Relative tolerance of some salmonids to acid waters. Verh. Internat. Verein. Limnol. 20: p. 2076 - 2084.
- 143 GROTERUD, O., 1972. Zooplankton and Fish in relation to Acid Melt Water and Anaerobic Deep Water in a Lake. Vatten 4: p. 329 - 332.

(section 2. 7)

- 366 GUNN, J.M., W. KELLER, 1980. Enhancement of the Survival of Rainbow Trout (*Salmo gairdneri*) Eggs and Fry in an Acid Lake through Incubation in Limestone. Can. J. Fish. Aquat. Sci., 37: p. 1522 - 1530.
- 516 GUNN, J.M., W. KELLER. 1981. Emergence and survival of lake trout (*Salvelinus namaycush*) and brook trout (*S. fontinalis*) from artificial substrates in an acid lake. Ontario fisheries technical report series, (1): 9 p.
- 1283 GUNN, J.M., W. KELLER, 1984. Spawning site water chemistry and trout (*Salvelinus namaycush*) sac fry survival during spring snowmelt. Can. J. Fish. Aquat. Sci. 41: p. 319 - 329.
- 1602 GUNN, J.M., W. KELLER, 1984. Effects of ice and snow cover on the chemistry of nearshore lake water during spring melt. Annals of glaciology 1985. 27 p.
- 1603 GUNN, J.M., W. KELLER, 1984. In situ manipulation of water chemistry using crushed limestone and observed effects on fish. Fisheries 9(1): p. 19 - 24.
- 88 HAGEN, A., A. LANGELAND, 1973. Polluted Snow in Southern Norway and the Effect of the Meltwater on Freshwater and Aquatic Organisms. Environmental Pollution 5: p. 45 - 57.
- 930 HAINES, T.A., 1983. Organochlorine residues in brook trout from remote lakes in the northeastern United States. Water, Air, and Soil Pollution 20(1): p. 47 - 54.
- 1466 HAINES, T.A., C.H. JAGOE, S.J. PAUWELS, 1985. Fish species distribution as a function of lake acidity in the northeastern USA. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 82 - 95.
- 1317 HAINES, T.A., JOHNSON, R.E., 1982. Acid rain/Fisheries. Proc. of an International Symposium on Acidic Precipitation and Fishery Impacts in Northeastern North America, American Fisheries Society, Maryland, U.S.A.. 357 p.
- 652 HARRIMAN, R., B.R.S. MORRISON, 1982. Ecology of streams draining forested and non-forested catchments in an area of central Scotland subject to acid precipitation. Hydrobiologia, 88(3): p. 251 - 263.

(section 2. 7)

- 482 HARRIMAN, R., B.R.S. MORRISON. 1981. Forestry, fisheries and acid rain in Scotland. Scottish Forestry, 35(2): p. 89 - 95.
- 131 HARVEY, H.H., 1975. Fish Populations in a Large Group of Acid-stressed lakes. Verh Internat. Véréin. Limnol. 19: p. 2406 - 2417.
- 446 HARVEY, H.H., 1979. The acid deposition problem and emerging research needs in the toxicology of fishes. Proc. Fifth Annual Aquatic Toxicity Workshop, Hamilton, Ontario, Nov. 7-9, 1978. Fish. Mar. Serv. Tech. Rep. 862: p. 115 - 128.
- 442 HAYA, K., B.A. WAIWOOD. 1981. Acid pH and chorionase activity of Atlantic salmon. (salmo-salar) eggs. Bulletin of Environmental Contamination and Toxicology, 27(1): p. 7 - 12.
- 1468 HAYA, K., B.A. WAIWOOD, L. VAN EECKHAUTE, 1985. Disruption of energy metabolism and smoltification during exposure of juvenile atlantic salmon Salmo-salar to low pH. Comp. Biochem. Physiol. C. Comp. Pharmacol. Toxicol. 82(2): p. 323 - 330.
- 1239 HOBE, H., C.M. WOOD, B.R. McMAHON, 1984. Mechanisms of acid-base and ionoregulation in white suckers (Catostomus commersoni) in natural soft water. J. Comp. Physiol. B. 154(1): p. 35 - 46.
- 1038 HOLETON, G.F., J.H. BOOTH, G.F. JANSZ, 1983. Acid-base balance and Na<sup>+</sup> regulation in rainbow trout during exposure to, and recovery from, low environmental pH. J. Exp. Zool. 228(1): p. 21 - 32.
- 1055 HOWELLS, G.D., 1983. Fishery status and water quality in areas affected by acid deposition. Wat. Sci. Tech. 15(12): p. 67 - 80.
- 1474 HOWELLS, G.D., 1985. Mechanisms and causes of fishery decline. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 62 - 81.
- 1099 HULSMAN, P.F., P.M. POWLES, J.M. GUNN, 1983. Mortality of walleye eggs and rainbow trout yolk-sac larvae in low-pH waters of the La Cloche mountain area, Ontario. Transactions of the American Fisheries Society 112(5): p. 680 - 688.

(section 2. 7)

- 133 IASF, 1981. Acid Rain and the Atlantic Salmon. Proceedings of a Conference held November 22-23, 1980. Portland, Maine. International Atlantic Salmon Foundation Special Publication 10. 174 p.
- 1478 INGERSOLL, C.G., T.W. LA POINT, H.L. BERGMAN, J. BRECK, 1985. An early life stage brook trout *Salvelinus fontinalis* experiment to determine the effects of pH, calcium and aluminum in low conductivity water. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 42 - 48.
- 66 JACOBSEN, O.J., 1977. Brown Trout (*Salmo Trutta L.*) Growth at Reduced pH. Aquaculture 11(1): p. 81 - 84.
- 1240 JAGOE, C.H., T.A. HAINES, F.W. KIRCHEIS, 1984. Effects of reduced pH on three life stages of Sunapee char *Salvelinus alpinus*. Bull. Environ. Contam. Toxicol. 33(4): p. 430 - 439.
- 97 JEFFRIES, D.S., C.M. COX, P.J. DILLON, 1979. Depression of pH in Lakes and Streams in Central Ontario during Snowmelt. Journal of the Fisheries Research Board of Canada 36 (6): p. 640 - 646.
- 113 JENSEN, K.W., E. SNEKVIK, 1972. Low pH Levels Wipe out Salmon and Trout Populations in Southernmost Norway. Ambio 1(6): p. 223 - 225.
- 377 JERNELOV, A., 1980. The Effects of Acidity on the Uptake of Mercury in Fish. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23 1979: p. 211 - 222.
- 225 JOHANNESSEN, M., T. DALE, E.T. GJESSING, A. HENRIKSEN, R.F. WRIGHT, 1975. Acid Precipitation in Norway: the regional distribution of contaminants in snow and the chemical concentration processes during snowmelt. In: Isotopes et impuretés dans les neiges et glaces, Actes du Colloque de Grenoble, août / septembre 1975. p. 116 -120.
- 273 JOHANSSON, N., G. MILBRINK, 1976. Some Effects of Acidified Water on the Early Development of Roach (*Rutilus rutilus L.*) and Perch (*Perca Fluviatilis L.*). Water Resources Bulletin 12(1): p. 39 - 47.

(section 2. 7)

- 29 JOHANSSON, N., J.E. KIHSTROM, A. WAHLBERG, 1973. Low pH Values Shown to Affect Developing Fish Eggs (Brachydanio rerio Ham.-Buch.). Ambio 2 (1-2): p. 42 - 43.
- 255 JOHANSSON, N., J.E. KIHSTROM, 1975. Pikes (Esox lucius L.) Shown to be Affected by low pH Values during First Weeks after Hatching. Environmental Research 9: p. 12 - 17.
- 264 JOHANSSON, N., P. RUNN, G. MILBRINK, 1977. Early Development of Three Salmonid Species in Acidified Water. Zoon 5(2): p. 127 - 132.
- 39 JOHNSON, D.W., D.A. WEBSTER, 1977. Avoidance of Low pH in Selection of Spawning Sites by Brook Trout (Salvelinus fontinalis). J. Fish. Res. Board Can. 34: p. 2215 - 2218.
- 1264 JOHNSTON, C.E., R.L. SAUNDERS, E.B. HENDERSON, P.R. HARMON, K. DAVIDSON, 1984. Chronic effects of low pH on some physiological aspects of smoltification in Atlantic salmon (Salmo salar). Can. Tech. Rep. Fish. Aquat. Sci. 1294: 7 p.
- 1123 JONES, H.C., J.C. NOGGLE, R.C. YOUNG, J.M. KELLY, ET AL., 1983. Investigations of the cause of fishkills in fish-rearing facilities in Raven Fork watershed. Tennessee Valley Authority, Division of Air and Water Resources. 60 p.
- 1482 JONES, K.A., T.J. HARA, E. SCHERER, 1985. Behavioral modifications in arctic char Salvelinus-alpinus chronically exposed to sublethal pH. Physiol. Zool. 58(4): p. 400 - 412.
- 973 JONES, M., D. MARMOREK, M. STALEY, 1982. Acidic precipitation in eastern Canada: an application of adaptive management to the problem of assessing and predicting impacts on an extensive basis. Department of Fisheries and Oceans, Great lakes Biolimnology Laboratory, Sault Ste-Marie and Burlington, Ontario. 145 p.
- 257 JORDAN, D.H.M., R. LLOYD, 1964. The Resistance of Rainbow Trout (Salmo gairdnerii Richardson) and Roach (Rutilus rutilus (L.)) to Alkaline Solutions. Int. J. Air Wat. Poll. 8: p. 405 - 409.

(section 2. 7)

- 1483 KAGAN, J., E.D. KAGAN, A.K. ISABELLE, P.A. KAGAN, S. QUIGLEY, 1985. The phytotoxicity of non-carcinogenic polycyclic aromatic hydrocarbons in aquatic organisms. Chemosphere 14(11-12): p. 1829 - 1834.
- 1219 KELSO, J.R.M., J.M. GUNN, 1983. Responses of fish communities to acidic waters in Ontario. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6) Hendrey G.R. (ed.). p. 105 - 115.
- 450 KENNEDY, L.A., 1980. Teratogenesis in Lake Trout (Salvelinus namaycush) in an Experimentally Acidified Lake. Can. J. Fish. Aquat. Sci., 37: p. 2355 - 2358.
- 1486 KROUT, R.T., W.A. DUNSON, 1985. Stimulation of sodium efflux in air-breathing fish exposed to low pH. Comp. Biochem. Physiol. C. Comp. Pharmacol. Toxicol. 82(1): p. 49 - 54.
- 1266 KWAIN, W., R.W. McCAULEY, J.A. MacLEAN, 1984. Susceptibility of starved, juvenile smallmouth bass, Micropterus dolomieu (Lacépde) to low pH. J. Fish Biol. 25(4): p. 501 - 504.
- 237 KWAIN, W.H., 1975. Effects of Temperature on Development and Survival of Rainbow Trout, (Salmo gairdneri) in Acid Waters. Journal of Fisheries Research board of Canada 32 (4): p. 493 - 497.
- 993 LANGLOIS, C., Y. VIGNEAULT, A. NADEAU, A. AHERN, 1984. Préoccupations sur les effets des précipitations acides sur le poisson et son habitat au Québec. Rapp. man. can. sci. halieut. aquat. 1753: 19 p.
- 967 LANGLOIS, C., Y. VIGNEAULT, L. DESILETS, A. NADEAU, M. LACHANCE, 1983. Evaluation des effets de l'acidification sur la physico-chimie et la biologie des lacs du bouclier canadien (Québec). Rapp. techn. can. sci. halieut. aquat. 1233: 129 p.
- 1312 LE JEUNE, R., B.P. HARVEY, Y. VIGNEAULT, 1984. Prospection sommaire de quelques habitats d'omble chevalier Salvelinus alpinus (Linné) du Québec méridional. Rapp. manus. can. sci. halieut. aquat. 1804: 47 p.

(section 2. 7)

- 1267 LECLERC, J., Y.C. CHAGNON, C. LANGLOIS, P. DULUDE, 1984. Influence de l'acidification sur la survie et le développement des oeufs et des alevins vésiculés d'omble de fontaine (Salvelinus fontinalis (Mitchill) dans la région de Charlevoix (Québec). Rapp. tech. can. sci. halieut. aquat. 1343: 56 p.
- 47 LEE, R.M., S.D. GERKING, 1980. Sensitivity of fish eggs to acid stress. Water Research 14: p. 1679 - 1681.
- 771 LEIVESTAD, H., 1982. Effects from acid rain on fish. In: Air Pollution by Nitrogen Oxides. Schneider, T. et L. Grant (Eds). Elsevier Scientific Publishing, Amsterdam. p. 567 - 576.
- 213 LEIVESTAD, H., I.P. MUNIZ, 1976. Fish Kill at Low pH in a Norwegian River. Nature 259: p. 391 - 392.
- 58 LEWIS, W.M., C. PETERS, 1956. Coal Mine Slag Drainage (Toxicity to representative fishes). Industrial Wastes. March-April. p. 145 - 147.
- 1491 LINDSTROM, T., W. DICKSON, G. ANDERSSON, 1984. Reclaiming acid high mountain lakes by liming; a progress report. Inst. Freshwater Res. Drottningholm Rep. 61: p. 128 - 137.
- 417 LOCKHART, W.L., A. LUTZ, 1975. Preliminary Biochemical observations of fishes inhabiting an acidified lake in Ontario, Canada. Proc. of the First International Symp. on Acid Precipitation and the Forest Ecosystem. Dochinger, L.S., T.A. Seliga, eds.; U.S. Department of Agriculture, Forest Service Gen. Tech. Report, NE-23 1976. p. 545 - 569.
- 1343 MARSHALL, W.S., 1985. Paracellular ion transport in trout opercular epithelium models osmoregulatory effects of acid precipitation. Can. J. Zool. 63(8): p. 1816 - 1822.
- 1037 McDONALD, D.G., 1983. The effects of H<sup>+</sup> upon the gills of freshwater fish. Can. J. Zool. 61(4): p. 691 - 703.
- 941 McDONALD, D.G., 1983. The interaction of environmental calcium and low pH on the physiology of the rainbow trout, Salmo Gairdneri. J. Exp. Biol. 102: p. 123 - 140.
- 358 McDONALD, D.G., C.M. WOOD, 1981. Branchial and Renal Acid and Ion Fluxes in the Rainbow Trout, Salmo Gairdneri, at low environmental pH. J. Exp. Biol. 93: p. 101 - 118.

(section 2. 7)

- 495 McMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.
- 528 McWILLIAMS, P.G., 1980. Acclimation to an acid medium in the brown trout *Salmo trutta*. J. exp. Biol. 88: p. 269 - 280.
- 529 McWILLIAMS, P.G., 1980. Effects of pH on sodium uptake in norwegian brown trout (*Salmo trutta*) from an acid river. J. exp. Biol. 88: p. 259 - 267.
- 263 MILBRINK, G., N. JOHANSSON, 1975. Some Effects of Acidification on Roe of Roach, (*Rutilus rutilus* L.), and Perch, (*Perca fluviatilis* L.) With Special Reference to the Avaa Lake System in Eastern Sweden. Fish. Board, Swed. Inst. Freshwater Res. Drottingholm, Rep. 54: p. 52 - 62.
- 940 MILLIGAN, C.L., C.M. WOOD, 1982. Disturbances in Haematology, fluid volume distribution and circulatory function associated with low environmental pH in the rainbow trout, *Salmo Gairdneri*. J. Exp. Biol. 99: p. 397 - 415.
- 1220 MILLS, K.H., 1983. Fish population responses to experimental acidification of a small Ontario lake. In: Early biotic responses to advancing lake acidification. (Acid precipitation series; V. 6). Hendrey G.R. (ed.). p. 117 - 131.
- 334 MINNS, C.K., 1981. Acid Rain: A preliminary Estimate of the Risk to Ontario's Inland Fisheries. Can. MS Rep. Fish. Aquat. Sci. 1622: 36 p.
- 1503 MOHR, L.C., S.M. CHALANCHUK, 1985. The effect of pH on sperm motility of suckers *Catostomus commersoni* in the Experimental Lakes Area, Canada. Environ. Biol. Fishes 14(4): p. 309 - 314.
- 1212 MOREAU, G., C. BARBEAU, J.-J. FRENETTE, ET AL., 1984. Influence des précipitations acides sur les populations d'ombles de fontaine (*Salvelinus fontinalis*) de la réserve des Laurentides. Université Laval, Centre de recherche sur l'eau pour Ministère de l'Environnement du Québec, Direction des inventaires et de la recherche, PA-7, 124 p.

(section 2. 7)

- 1060 MOREAU, G., C. BARBEAU, J.J. FRENETTE, J. SAINT-ONGE, M. SIMONEAU, 1983. Zinc, manganese and strontium in opercula and scales of brook trout (Salvelinus fontinalis) as indicators of lake acidification. Can. J. Fish. Aquat. Sci. 40(10): p. 1685 - 1691.
- 258 MOUNT, D.I., 1973. Chronic Effect of Low pH on Fathead Minnow Survival, Growth and Reproduction. Water Research 7: p. 987 - 993.
- 918 MUNIZ, I.P., H.M. SEIP, 1982. Possible effects of reduced norwegian sulphur emissions on the fish populations in lakes in southern Norway. Norwegian Ministry of Environment, Central Institute for Industrial Ressources. Report no. 81 03 13-2. 28 p.
- 1012 NADEAU, A., C. DESJARDINS, Y. VIGNEAULT, 1984. Teneurs en métaux et ions majeurs des chairs de poisson de trente-deux lacs du Québec. Rapport manuscrit canadien des sciences halieutiques et aquatiques no 1746. Pêches et Océans Canada, Québec. 79 p.
- 876 NELSON, J.A., 1982. Physiological observations on developing rainbow trout, "salmo gairdneri" (Richardson), exposed to low pH and varied calcium ion concentrations. Journal of Fish Biology, 20(3): p. 359 - 372.
- 222 NEVILLE, C.M., 1979. Sublethal Effects of Environmental Acidification on Rainbow Trout (Salmo gairdneri). Journal of The Fisheries Research Board of Canada 36(1): p. 84 - 87.
- 42 NICHOLS, Jr. L.E., F.J. Bulow, 1973. Effects of Acid Mine Drainage on the Stream Ecosystem of the East Fork of the Obey River, Tennessee. Journal of the Tennessee Academy of Science. 48(1): p. 30 - 39.
- 951 NIEMINEN, M., I. KORHONEN, M. LAITINEN, 1982. Effects of pH on the gill ATPase activity and blood composition of whitefish (Coregonus peled) and trout (Salmo Trutta fario). Comp. Biochem. Physiol., 72A(4): p. 637 - 642.
- 875 NILSSEN, J.P., 1982. Acidification in southern Norway: Seasonal variation of aluminium in lake waters. Hydrobiologia, 94(3): p. 217 - 221.
- 474 PANKO, A.W., 1980. Mercury uptake by Fish in Acidified Lake Ecosystems. Environmental Geochemistry Report, McMaster University. 43 p.

(section 2. 7)

- 512 PARSONS, J.D., 1976. Effects of Acid-Mine Wastes on Aquatic Ecosystems. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 571 - 595.
- 223 PETERSON, R.H., P.B. DAYE, J.L. METCALFE, 1980. Inhibition of of Atlantic Salmon (*Salmo salar*) Hatching at Low pH. Canadian Journal of Fisheries and Aquatic Sciences 37(5): p. 770 - 774.
- 823 PETERSON, R.H., D.J. MARTIN-ROBICHAUD, 1982. Food habits of fishes in ten New Brunswick lakes. Canadian technical report of fisheries and aquatic sciences 1094: 43 p.
- 712 PFEIFFER, M.H., P.J. FESTA, 1980. Acidity status of lakes in the Adirondack region of New-York in relation to fish resources. New York State Department of Environmental Conservation. 36 p.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 555 POWELL, J.J., 1976. Preliminary report on the effects of neutralization on the fish community of Nelson lake, near Sudbury, Ontario. Ministry of Natural Resources, Fish and Wildlife Branch, Sudbury, Ontario. 38 p.
- 1521 RAHEL, F. J., 1985. Biogeographic influences, species interactions and lake acidification. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 30 - 41.
- 946 RAHEL, F.J., J.J. MAGNUSON, 1983. Low pH and the absence of fish species in naturally acidic Wisconsin lakes: inferences for cultural acidification. Can. J. Fish. Aquat. Sci. 40(1): p. 3 - 9.
- 932 RASK, M., 1983. The effect of low pH on perch, *Perca fluviatilis* L.I.-Effects of low pH on the development of eggs of perch. Ann. Zool. Fennici 20(1): p. 73 - 76.
- 1293 RASK, M., 1984. The effect of low pH on perch, *Perca fluviatilis* L. II. The effect of acid stress on different development stages of perch. Ann. Zool. Fennici 21(1): p. 9 - 13.

(section 2. 7)

- 1294 RASK, M., 1984. The effect of low pH on perch, *Perca fluviatilis* L. III. The perch population in a small, acidic, extremely humic forest lake. Ann. Zool. Fennici 21(1): p. 15 - 22.
- 699 RICHARD, Y., 1982. Relations entre le niveau d'acidité de 158 lacs du parc des Laurentides et l'évolution de leurs statistiques de pêche au cours des neuf dernières années. Ministère de l'Environnement du Québec, Direction générale des inventaires et de la recherche, service de la qualité des eaux, PA-5. 115 p.
- 979 RICHARD, Y., 1982. Relationships between the acidity level of 158 lakes in the Parc des Laurentides and the evolution of their fishing statistics over the last nine years. Ministère de l'Environnement du Québec, Direction de la recherche, Service de la qualité des eaux, PA-5A. 115 p.
- 205 ROBINSON, G.D., W.A. DUNSON, J.E. WRIGHT, G.E. MAMOLITO, 1976. Differences in Low pH Tolerance Among Strains of Brook Trout (*Salvelinus Fontinalis*). J. Fish. Biol. 8: p. 5 - 17.
- 1636 RODRIGUE, J., J.-L. DESGRANGES, 1988. Etude de la qualité du milieu aquatique et des composantes biologiques de 81 lacs à sauvagine du Québec méridional. Ministère de l'Environnement du Québec, Direction des relevés aquatiques. Rapport ENVIRODOQ 860061. 178 p.
- 1070 ROMBOUGH, P.J., 1982. Effects of low pH on eyed embryos and alevins of Pacific salmon. Can. J. Fish. Aquat. Sci. 40(10): p. 1575 - 1582.
- 265 RUNN, P., N. JOHANSSON, G. MILBRINK, 1977. Some Effects of low pH on the Hatchability of Eggs of Perch (*Perca Fluviatilis* L.). Zoon 5(2): p. 115 - 125.
- 46 RYAN, P.M., H.H. HARVEY, 1977. Growth of Rock Bass, *Ambloplites rupestris*, in Relation to the Morphoedaphic Index as an Indicator of an Environmental Stress. J. Fish. Res. Board Can. 34: p. 2079 - 2088.
- 56 RYAN, P.M., H.H. HARVEY, 1980. Growth responses of yellow perch, *Perca flavescens* (Mitchill), to lake acidification in the La Cloche Mountain Lakes of Ontario. Env. Biol. Fish. 5(2): p. 97 - 108.

(section 2. 7)

- 589 RYAN, P.M., H.H. HARVEY. 1981. Factors accounting for variation in the growth of rock bass (Ambloplites rupestris) and yellow perch (Perca flavescens) in the acidifying La Cloche Mountain Lakes of Ontario, Canada. Verh. Internat. Verein. Limnol., 21: p. 1231 - 1237.
- 1192 SADLER, K., 1983. A model relating the results of low pH bioassay experiments to the fishery status of Norwegian lakes. Freshwater Biology 13(5): p. 453 - 463.
- 240 SANO, H., 1976. The role of pH on the acute Toxicity of Sulfite in Water. Water Research 10: p. 139 - 142.
- 1071 SAUNDERS, R.L., E.B. HENDERSON, P.R. HARMON, C.E. JOHNSTON, J.G. EALES, 1983. Effects of low environmental pH on smolting of Atlantic salmon (Salmo salar). Can. J. Fish. Aquat. Sci. 40(8): p. 1203 - 1211.
- 168 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1979. Effects of Acidic Precipitation on Precambrian Freshwaters in Southern Ontario. Journal of great Lakes Research 5 (1): p. 45 - 51.
- 9 SCHOFIELD, C.L., 1976. Acid Precipitation: Effects on Fish. Ambio 5(5-6): p. 228 - 230.
- 108 SCHOFIELD, C.L., 1977. Acid snow - Melt effects on water quality and fish survival in the Adirondack mountains of New-York State. 1977 U.S. National Technical Information Service. Completion Report, PB-277-801. 27 p.
- 1604 SCHOFIELD, C.L., 1979. Processes limiting fish populations in acidified lakes. In: Atmospheric sulfur deposition - Environmental impact and health effects. Proceedings of the second life science symposium, Gatlinburg, Tennessee, October 14-18, 1979. Ann Arbor Science Publisher, 568 p.
- 372 SCHOFIELD, C.L., J.R. TROJNAR, 1980. Aluminum Toxicity to Brook Trout (Salvelinus fontinalis) in Acidified Waters. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23 1979. p. 341 - 366.
- 571 SCHOFIELD, Jr., L.L., 1965. Water Quality in Relation to Survival of Brook Trout (Salvelinus fontinalis (Mitchill)). Transaction of the American Fisheries Society 94: p. 227 - 235.

(section 2. 7)

- 1129 SCRUTON, D.A., 1983. A survey of headwater lakes in insular Newfoundland, with special reference to acid precipitation. Can. Tech. Rep. Fish, Aquat. Sci. 1195: 110 p.
- 1249 SHARPE, W.E., D.R. DE WALLE, R.T. LEIBFRIED ET AL., 1984. Causes of acidification of four streams on Laurel Hill in southwestern Pennsylvania. J. Environ. Qual. 13(4): p. 619 - 631.
- 1140 SHARPE, W.E., W.G. KIMMEL, E.S. YOUNG Jr., D.R. De WALLE, 1983. In-situ bioassays of fish mortality in two Pennsylvania streams acidified by atmospheric deposition. Northeastern Environmental Science 2(3-4): p. 171 - 178.
- 1169 SLOAN, R., C.L. SCHOFIELD, 1983. Mercury levels in brook trout (Salvelinus fontinalis) from selected acid and limed Adirondack lakes. Northeastern Environmental Science 2(3-4): p. 165 - 170.
- 587 SOHTELL, M., P. RUNN. 1981. Sodium and potassium transport in brown trout yolk sac fry. Acta Physiol. Scand., 112(2): p. 24A.
- 871 SOIVIO, A., 1982. Physiological effects of lowered ambient pH on fish. Luonnon Tutkija, 86(1): p. 52 - 54. (En finnois avec résumé en anglais).
- 243 SPRULES, W.G., 1975. Factors affecting the structure of limnetic crustacean Zooplankton communities in central Ontario lakes. Verh. Internat. Verein. Limnol. 19: p. 635 - 643.
- 1349 SPRY, D.J., C.M. WOOD, 1985. Ion flux rates, acid-base status, and blood gases in rainbow trout, Salmo gairdneri, exposed to toxic zinc in natural soft water. Can. J. Fish. Aquat. Sci. 42(8): p. 1332 - 1341.
- 630 SPRY, D.J., C.M. WOOD, P.V. HODSON, 1981. The effects of environmental acid on freshwater fish with particular reference to the softwater lakes in Ontario and the modifying effects of heavy metals. A literature review. Canadian Technical Report of Fisheries and Aquatic Sciences, no. 999. 144 p.
- 438 STASSEN, G.M., 1974. Aspects of Sudbury Environmental Degradation Problem as Relates to the Aquatic Communities. Report for the Ont. Ministry of Natural Resources: 70 p.

(section 2. 7)

- 1237 STAURNES, M., T. SIGHOLT, O.B. REITE, 1983. Reduced carbonic anhydrase and Na - K - ATPase activity in gills of salmonids exposed to aluminium - containing acid water. *Experientia* 40(2): p. 226 - 227.
- 1277 STONER, J.H., A.S. GEE, K.R. WADE, 1984. The effects of acidification on the ecology of streams in the upper Tywi Catchment in West Wales. *Environmental Pollution (Series A)* 35(2): p. 125 - 157.
- 1351 STUART, S., R. MORRIS, 1985. The effects of season and exposure to reduced pH (abrupt and gradual) on some physiological parameters in brown trout (Salmo-trutta). *Can. J. Zool.* 63(5): p. 1078 - 1083.
- 244 SWARTS, F.A., W.A. DUNSON, J.E. WRIGHT, 1978. Genetic and Environmental Factors Involved in Increased Resistance of Brook Trout to Sulfuric Acid Solutions and Mine Acid Polluted Waters. *Transactions of the American Fisheries Society* 107(5): p. 651 - 677.
- 238 TROJNAR, J.R., 1977. Egg Hatchability and Tolerance of Brook Trout (Salvelinus Fontinalis) Fry at low pH. *Journal of Fisheries Research Board of Canada* 34(4): p. 574 - 579.
- 398 TROJNAR, J.R., 1977. Egg and Larval Survival of White Suckers (Catostomus commersoni) at Low pH. *J. Fish. Res. Board Can.*, 34: p. 262 - 266.
- 93 TURNER, W.R., 1958. The effects of acid mine pollution on the fish population of Goose Creek, Clay county, Kentucky. *The Progressive Fish-Culturist* 20: p. 45 - 46.
- 966 VAN COILLIE, R., C. THELLEN, P.G.C. CAMPBELL, Y. VIGNEAULT, 1983. Effets toxiques de l'aluminium chez les salmonidés en relation avec des conditions physico-chimiques acides. *Rapp. techn. can. sci. halieut. et aquat.* no 1237. 88 p.
- 381 VAN LOON, J.C., R.J. BEAMISH, 1977. Heavy - Metal Contamination by Atmospheric Fallout of Several Flin Flon Area Lakes and the Relation to Fish Populations. *J. Fish. Res. Board Can.*, 34(7): p. 899 - 906.
- 919 VERREAULT, G., 1982. Etude ichthyologique du lac Laflamme - Parc des Laurentides. *Pêches et Océans Canada, Direction de la recherche.* 34 p.

(section 2. 7)

- 1025 VERREAULT, G., C. LANGLOIS, 1984. Etude de la population d'Ombre de fontaine *Salvelinus fontinalis* (Mitchill) du lac Laflamme, Parc des Laurentides (Québec). Rapp. techn. can. sci. halieut. aquat. 1316: 61 p.
- 1179 WAIWOOD, B.A., K. HAYA, 1983. Levels of chorionase activity during embryonic development of *Salmo salar* under acid conditions. Bull. Environ. Contam. Toxicol. 30(5): p. 511 - 515.
- 783 WATT, W.D., C.D. SCOTT, W.J. WHITE, 1983. Evidence of acidification of some Nova Scotian rivers and its impact on Atlantic salmon "*salmo salar*". Canadian Journal of Fisheries and Aquatic Sciences, 40(4): p. 462 - 473.
- 1555 WEINER, G.S., C.B. SCHRECK, W.H. LI, 1985. Effect of low pH on the reproduction of rainbow trout *Salmo gairdneri*. In: Salmonid reproduction. An international symposium. Iwamoto, R.N. and S. Sower (ed.), Meeting, Bellevue, Wash., USA, Oct. 31-Nov. 2, 1983. p. 91.
- 1121 WESTERN AQUATICS INC., 1983. An assessment of the relationship among acidifying depositions, surface water acidification, and fish populations in North America. EPRI-EA-3127-Vol.1. Research project 1910-2. 169 p.
- 861 WHELPDALE, D.M., 1983. Dépôts acides: répartition et incidences. Bulletin de la Qualité des Eaux VIII(2): p. 73 - 80.
- 1221 WIENER, J.G., P.J. RAGO, J.M. EILERS, 1983. Species composition of fish communities in Northern Wisconsin lakes: Relation to pH. In: Early biotic responses to advancing lake acidification (Acid precipitation series; V. 6). Hendrey G.R. (ed.). p. 133 - 146.
- 1073 WREN, C.D. H.R. MACCRIMMON, 1983. Mercury levels in the sunfish *Lepomis gibbosus*, relative to pH and other environmental variables of Precambrian Shield lakes. Can. J. Fish. Aquat. Sci. 40(10): p. 1737 - 1744.
- 1557 WRIGHT, P.A., C.M. WOOD, 1985. Analysis of branchial ammonia excretion in the freshwater rainbow trout; effects of environmental pH change and sodium uptake blockade. J. Exp. Biol. 114: p. 329 - 353.
- 1074 WRIGHT, R.F., A. HENRIKSEN, 1983. Restoration of Norwegian lakes by reduction in sulphur deposition. Nature 305 (5933): p. 422 - 424.

(section 2. 7)

- 406 WRIGHT, R.F., E. SNEKVIK, 1978. Acid precipitation: Chemistry and fish populations in 100 lakes in southernmost Norway. International association of theoretical & applied limnology, 20: p. 765 - 775.
- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo. 467 p.
- 424 YAN, N.D., R.E. GIRARD, C.J. LAFRANCE, 1979. Survival of Rainbow Trout, Salmo Gairdneri, in submerged Enclosures in Lakes Treated with Neutralizing Agents near Sudbury, Ontario. Ontario Ministry of the Environment, 26 p.
- 1224 YAN, N.D., G.E. MILLER, 1984. Effects of deposition of acids and metals on chemistry and biology of lakes near Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J. Nriagu (ed.). p. 243 - 282.
- 817 ZISCHKE, J.A., ET AL., 1983. Acidification effects on macroinvertebrates and fathead minnows (pimephales promelas) in outdoor experimental channels. Water Resources, 17(1): p. 47 - 63.

## 2. 8 Amphibiens

- 1095 COOK, R.P., 1983. Effects of acid precipitation on embryonic mortality of Ambystoma Salamanders in the Connecticut Valley of Massachusetts. Biological Conservation 27(1): p. 77 - 88.
- 1483 KAGAN, J., E.D. KAGAN, A.K. ISABELLE, P.A. KAGAN, S. QUIGLEY, 1985. The phytotoxicity of non-carcinogenic polycyclic aromatic hydrocarbons in aquatic organisms. Chemosphere 14(11-12): p. 1829 - 1834.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 431 POUGH, F.H., 1976. Acid Precipitation and Embryonic Mortality of Spotted Salamanders, Ambystoma maculatum. Science, 192: p. 68 - 70.
- 509 POUGH, F.H., R.E. WILSON, 1976. Acid precipitation and reproductive success of Ambystoma Salamanders. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 531 - 544.
- 77 POUGH, F. H., R.E. WILSON, 1977. Acid Precipitation and Reproductive Success of Ambystoma Salamanders. Water, Air, and Soil Pollution 7(3): p. 307 - 316.

## 2. 9 Oiseaux

- 1634 CANADA, CHAMBRE DES COMMUNES, 1986. Procès-verbaux et témoignages du Comité spécial sur les pluies acides. première session de la 33ème législature, 1984-1985-1986. Chambre des Communes, fascicule no 8: p. 4 - 18.
- 1635 DARVEAU, M., J.-L. DESGRANGES, Y. MAUFFETTE, 1989. Le déperissement et les oiseaux nicheurs des érablières au Québec. Conférence présentée au 2ème atelier sur le déperissement des érablières, Saint-Hyacinthe, Québec, 23 - 24 février 1989. Centre de recherche acéricole. Extrait du cahier des conférences. p. 59 - 65.
- 1637 DESGRANGES, J.-L., 1987. Forest birds as biological indicators of the progression of maple dieback in Quebec. ICBP Technical Publication 6: p. 249 - 257.
- 1632 DESGRANGES, J.-L., M. DARVEAU, 1985. Effect of lake acidity and morphometry on the distribution of aquatic birds in southern Quebec. Holartic Ecology 8: p. 181 - 190.
- 1633 DESGRANGES, J.-L., M. DARVEAU, 1989. Les pluies acides et les oiseaux au Canada. L'Homme et l'Oiseau (Bruxelles, Belgique). Avril-Mai-Juin 1989, 27ème année. p. 87 - 93.
- 1638 DESGRANGES, J.-L., J. RODRIGUE, 1986. Influence of acidity and competition with fish on the development of ducklings in Quebec. Water, Air, and Soil Pollution 30(1986): p. 743 - 750.
- 352 PEAKALL, D.B., 1979. Acid precipitation and Wildlife. Canadian Wildlife Service, Ottawa: 4 p.
- 1636 RODRIGUE, J., J.-L. DESGRANGES, 1988. Etude de la qualité du milieu aquatique et des composantes biologiques de 81 lacs à sauvagine du Québec méridional. Ministère de l'Environnement du Québec, Direction des relevés aquatiques. Rapport ENVIRODOQ 860061. 178 p.

## 2.10 Méthodes et techniques

- 51 BAKSI, W.F., J. RICHARDS, G. CRAIG, J. REINKE, 1978. Suitability of Water Quality in two Reclaimed Lakes in the Sudbury Area for Maintaining Fish Populations. Technical Bulletin 6(78). Ontario, Ministry of the Environment, Limnology and Toxicity Section, 13 p.
- 1287 BENNETT, B.G., 1985. Modeling exposure routes to man of trace metals associated with acid precipitation. Environ. Health Perspect. 63: p. 89 - 92.
- 1337 ERICKSON, R.J., 1985. An evaluation of mathematical models for the effects of pH and temperature on ammonia toxicity to aquatic organisms. Water Resources 19(8): p. 1047 - 1058.
- 1087 FORTESCUE, J.A.C., M. DICKMAN, J. TERASMAE, 1982. The principle of successive approximations applied to an environmental geochemical study north of lake Superior. Trace Subst. Environ. Health, 16: p. 164 - 169.
- 366 GUNN, J.M., W. KELLER, 1980. Enhancement of the Survival of Rainbow Trout (Salmo gairdneri) Eggs and Fry in an Acid Lake through Incubation in Limestone. Can. J. Fish. Aquat. Sci. 37: p. 1522 - 1530.
- 973 JONES, M., D. MARMOREK, M. STALEY, 1982. Acidic precipitation in eastern Canada: an application of adaptive management to the problem of assessing and predicting impacts on an extensive basis. Department of Fisheries and Oceans, Great lakes Biolimnology Laboratory, Sault Ste-Marie and Burlington, Ontario. 145 p.
- 417 LOCKHART, W.L., A. LUTZ, 1975. Preliminary Biochemical observations of fishes inhabiting an acidified lake in Ontario, Canada. Proc. of the First International Symp. on Acid Precipitation and the Forest Ecosystem. Dochinger, L.S., T.A. Seliga (eds.). U.S. Department of Agriculture, Forest Service Gen. Tech. Report, NE-23 1976. p. 545 - 569.
- 46 RYAN, P.M., H.H. HARVEY, 1977. Growth of Rock Bass, Ambloplites rupestris, in Relation to the Morphoedaphic Index as an Indicator of an Environmental Stress. J. Fish. Res. Board Can. 34: p. 2079 - 2088.

(section 2.10)

- 1192 SADLER, K., 1983. A model relating the results of low pH bioassay experiments to the fishery status of Norwegian lakes. Freshwater Biology 13(5): p. 453 - 463.
- 1074 WRIGHT, R.F., A. HENRIKSEN, 1983. Restoration of Norwegian lakes by reduction in sulphur deposition. Nature 305 (5933): p. 422 - 424.

## CHAPITRE 3: HYDROGEOCHIMIE

### 3. 1 Ouvrages de synthèse

#### Cote

- 139 CONROY, N., W. KELLER, 1976. Geological Factors Affecting Biological Activity in Precambrien Shield Lakes. Canadian Mineralogist 14: p. 62 - 72.
- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 209 GORHAM, E., 1961. Factors Influencing Supply of Major Ions to Inland Waters, with Special Reference to the Atmosphere. Geological Society of America Bulletin 72: p. 795 - 840.
- 114 JOHNSON, N.M., R.C. REYNOLDS, G.E. LICKENS, 1972. Atmospheric Sulfur: Its Effects on the chemical weathering of New England. Science 177: p. 514 - 516.
- 1108 OLSON, R.A., 1983. The impacts of acid deposition on N and S cycling. Environmental and Experimental Botany 23(3): p. 211 - 223.
- 23 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. Extensive Monitoring of Lakes in the Greater Sudbury Area 1974-76. Sudbury Environmental Study Report.
- 696 SWEDEN. SWEDISH MINISTRY OF AGRICULTURE, 1982. Acidification today and tomorrow. Study prepared for the 1982 Stockholm Conference. 231 p.
- 78 WRIGHT, R.F., T. DALE, E.T. GJESSING, G.R. HENDREY, A. HENRIKSEN, M. JOHNNESEN, I.P. MUNIZ, 1976. Impact of Acid Precipitation on Freshwater Ecosystems in Norway. Water, Air and Soil Pollution, 6(2-4): p. 483 - 499.

### 3. 2 Qualité de l'eau

- 1566 ABRAHAMSEN, G., A. STUANES, 1980. Effects of simulated rain on the effluent from lysimeters with acid, shallow soil, rich in organic matter. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 152 - 153.
- 241 ADAMSKI, J.M., M.F.P. MICHALSKI, 1975. Reclamation of acidified lakes Middle and Lohi, Sudbury, Ontario. Verhandlungen, Internationale Vereinigung fur Theoretische und Angewandte limnology 19: p. 1971 - 1983.
- 713 AGNEW, T.A., E. WILSON, L.A. BARRIE, J.D. REID, D. FAULKNER, 1982. Estimation of long term acidic deposition over snow and snowmelt shock potential. In: Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées, Fredericton, 14 - 15 juin 1982, p. 597 - 614.
- 1619 AHERN, A., S. CANTIN, G. VERREAULT, 1987. Etude de l'activité bactérienne et fongique de quatre rivières à saumons de la Côte-Nord du St-Laurent, en relation avec des conditions physico-chimiques acides. Pêches et Océans. Rapp. tech. can. sci. halieut. aquat. 1565: 30 p.
- 643 AKIELASZEK, J.J., T.A. HAINES, 1981. Mercury in the muscle tissue of fish from three northern Maine lakes. Bulletin of Environmental Contamination and Toxicology, 27(2): p. 201 - 108.
- 112 ALMER, B., W. DICKSON, C. EKSTROM, E. HORNSTROM, U. MILLER, 1974. Effects of Acidification on Swedish Lakes. Ambio 3(1): p. 30 - 36.
- 1418 ANDELMAN, J.B., J.R. MILLER. 1986. Les effets des précipitations acides sur les composés d'aluminium dans les cours d'eau. Bulletin de la Qualité des Eaux, Environnement Canada, 11(1): p. 21 - 27.
- 1423 ANDERSEN, R., I.F. MUNIZ, J. SKURDAL, 1984. Effects of acidification on age class composition in arctic char Salvelinus-alpinus and brown trout Salmo-trutta in a coastal area southwest Norway. Inst. Freshwater Res. Drottningholm Rep. 61: p. 5 - 15.

(section 3. 2)

- 1424 ANDERSSON, B., P. ANDERSSON, 1984. The distribution of trout Salmo-trutta in relation to pH - an inventory of small streams in Delsbo, Sweden. Inst. Freshwater Res. Drottningholm Rep. 61: p. 28 - 33.
- 1425 ANDERSSON, P., P. NYEERG, 1984. Experiments with brown trout Salmo-trutta during spring in mountain streams at low pH and elevated levels of iron, manganese and aluminium. Inst. Freshwater Res. Drottningholm Rep. 61: p. 34 - 47.
- 1394 ARNOLD, D.E., R.W. LIGHT, E.A. PAUL, 1985. Vulnerability of selected lakes and streams in the middle atlantic region to acidification - a regional survey. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(19): p. I - XII, 1 - 133.
- 458 ARNOLD, D.E., R.W. LIGHT, V.J. DYMOND, 1980. Probable Effects of Acid Precipitation on Pennsylvania Waters. EPA-600/3 80-012, Corvallis Environmental Research Laboratory: 20 p.
- 867 ARVOLA, L., M. RASK, 1982. Effects of acidification in a small forest lake. Luonnon Tutkija, 86(1): p. 46 - 49. (En finnois avec résumé en anglais)
- 283 AUCLAIR, J.C., M. BISSON, M. LACHANCE, 1982. Etude des variations de l'alcalinité des lacs de tête de la région de Québec. INRS-Eau, rapport scientifique no 139. 51 p.
- 331 BAKER, J.P., 1981. Aluminum toxicity to fish as related to acid precipitation and Adirondack surface water quality. Thesis presented to the faculty of the graduate school of Cornell University, Ithaca, N.Y., U.S.A. 461 p.
- 51 BAKSI, W.F., J. RICHARDS, G. CRAIG, J. REINKE, 1978. Suitability of Water Quality in two Reclaimed Lakes in the Sudbury Area for Maintaining Fish Populations. Technical Bulletin 6(78). Ontario, Ministry of the Environment, Limnology and Toxicity Section. 13 p.
- 1428 BANDY, J.T., 1985. Water characteristics. J. Water Pollut. Control Fed. 57(6): p. 494 - 497.
- 383 BEAMISH, R.J., 1974. Growth and Survival of White Suckers (Catostomus commersoni) in an Acidified Lake. J. Fish, Res. Board Can., 31(1): p. 49 - 54.

(section 3. 2)

- 259 BEAMISH, R.J., 1974. Loss of Fish Populations from Unexploited Remote Lakes in Ontario, Canada as a Consequence of Atmospheric Fallout of Acid. Water Research 8: p. 85 - 95.
- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 595 BEAMISH, R.J., H.H. HARVEY, 1972. Acidification of the La Cloche Mountain Lakes, Ontario, and Resulting Fish Mortalities. Journal Fisheries Research Board of Canada 29(8): p. 1131 - 1143.
- 111 BEAMISH, R.J., W.L. LOCKHART, J.C. VAN LOON, H.H. HARVEY, 1975. Long-Term Acidification of a Lake and Resulting Effects on Fishes. Ambio 4(2): p. 98 - 102.
- 534 BEAMISH, R.J., G.A. MCFARLANE, J.C. VAN LOON, J. LICHWA, 1975. An Examination of the possible effects of Sudbury nickel mining and smelting operations on fishes and the water chemistry of lakes within the whitefish lake indian reserve. Environnement Canada, Service des Pêches et des Sciences de la mer. Rapport technique no 579, 52 p.
- 597 BEAMISH, R.J., J.C. VAN LOON, 1977. Precipitation Loading of Acid and Heavy Metals to a Small Acid Lake near Sudbury, Ontario. Journal Fisheries Research Board of Canada 34(5): p. 649 - 658.
- 609 BEAVER, J.R., T.L. CRISMAN, 1981. Acid precipitation and the response of ciliated protozoans in Florida lakes. Verh. Internat. Verin. Limnol., 21: p. 353 - 358.
- 1330 BEDARD, Y., 1984. Evolution de la qualité des eaux de fonte au Lac Laflamme (Québec), printemps 1984. Environnement Canada, Direction générale des eaux intérieures, Région du Québec. 52 p.
- 1578 BEGGS, G.L., J.M. GUNN, C.H. OLIVER, 1985. The sensitivity of Ontario lake trout (Salvelinus namaycush) and lake trout lakes to acidification. Ontario Ministry of Natural Resources, Fisheries Branch, Toronto, Ontario. 25 p.
- 1429 BEGGS, G.L., J.A. MACLEAN, J.G. GUNN, M.L. JONES, K. MINNS, 1985. The case for effects of acid deposition on Ontario Canada fisheries. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 49 - 61.

(section 3. 2)

- 254 BELL, H.L., 1970. Effects of pH on the life cycle of the midge Tanytarsus Dissimilis. The Canadian Entomologist 102: p. 636 - 639.
- 170 BENGTTSSON, B., W. DICKSON, 1980. Liming Acid Lakes in Sweden. Ambio 9 (1): p. 34 - 36.
- 1599 BERGSTROM, S., B. CARLSSON, G. SANDBERG, 1985. Integrated modelling of runoff, alkalinity, and pH on a daily basis. Nordic Hydrology 16: p. 89 - 104.
- 1310 BERRYMAN, D., 1984. Caractéristiques statistiques des séries temporelles du Lac Laflamme et incidences sur l'opération du réseau TADPA de détection des tendances dans l'acidification des eaux de surface. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 48 p.
- 1109 BJARNBORG, B., 1983. Dilution and acidification effects during the spring flood of four Swedish mountain brooks. Hydrobiologia 101(1 - 2): p. 19 - 26.
- 901 BJERLE, I., G. ROCHELLE, H. SVERDRUP, 1982. Limestone dissolution in acid lakes. Vatten, 38(2): p. 156 - 163.
- 954 BOBEE, B., M. LACHANCE, 1983. A method for analyzing data on lake acidification and its application in Quebec, Canada. Water Qual. Bull. 8(3): p. 160 - 167.
- 910 BOBEE, B., M. LACHANCE, J. HAEMMERLI, A. TESSIER, J.-Y. CHARETTE, J. KRAMER, 1983. Evaluation de la sensibilité à l'acidification des lacs du sud du Québec et incidences sur le réseau d'acquisition de données. INRS-Eau, pour Environnement Canada, Direction générale des eaux intérieures, région du Québec. Rapport scientifique no 157. 198 p.
- 987 BOBEE, B., M. LACHANCE, J. HAEMMERLI, A. TESSIER, J.-Y. CHARETTE, J. KRAMER, 1983. Evaluation de la sensibilité à l'acidification des lacs du sud du Québec et incidences sur le réseau d'acquisition de données. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 203 p.
- 128 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. Nature et étendue de l'acidification des lacs du Québec. INRS-Eau, rapport scientifique no 140, pour le ministère de l'Environnement du Québec, Service de la qualité des eaux. 243 p.

(section 3. 2)

- 982 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. The nature and extent of acidification in Quebec Lakes. INRS-Eau, scientific report no 140 for the Ministère de l'Environnement du Québec, Service de la qualité des eaux. 210 p.
- 971 BOOTY, W.G., 1983. Watershed acidification model and the soil acid neutralization capacity concept. Ph. D. Thesis, McMaster University, Hamilton, Ont. 194 p.
- 1094 BORG, H., 1983. Trace metals in Swedish natural fresh waters. Hydrobiologia 101(1-2): p. 27 - 34.
- 1432 BOSMAN, H.H., P.L. KEMPSTER, 1985. Precipitation chemistry of Roodeplaat Dam catchment, South Africa. Water S. A. (Pretoria) 11(3): p. 157 - 164.
- 1257 BOTTOMLEY, D.J., D. CRAIG, L.M. JOHNSTON, 1984. Neutralization of acid runoff by groundwater discharge to streams in canadian precambrian shield watersheds. J. Hydrol., 75: p. 1 - 26.
- 461 BRADFORD, G.R., A.L. PAGE, I.R. STRAUGHAN. 1981. Are Sierra lakes becoming acid ?. California Agriculture, 35(5-6): p. 6 - 7.
- 1565 BRAEKKE, F.H., 1980. Sulphate dynamics in natural environments; preliminary results from a case study. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 156 - 157.
- 1230 BROBERG, O., G. PERSSON, 1984. External budgets for phosphorus, nitrogen and dissolved organic carbon for the acidified lake Gardsjon. Arch. Hydrobiol. 99(2): p. 160 - 175.
- 1009 BROSSET, C., 1983. Characterization of Acidity in natural waters. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 44 - 55.
- 1420 BROUARD, D., M. LACHANCE. 1986. Effets des précipitations acides sur un sous-bassin versant de la rivière des Escoumins: réponse hydrochimique et biologique. Rapp. Tech. Can. Sci. Halieutiques et Aquat. 1452: 89 p.

(section 3. 2)

- 965 BROUARD, D., M. LACHANCE, C. LANGLOIS, 1983. Qualité physicochimique printanière des eaux de surface et des précipitations dans le secteur amont de la rivière des Escoumins. Rapport technique canadien des sciences halieutiques et aquatiques. no. 1228. 39 p.
- 702 BROUARD, D., M. LACHANCE, G. SHOONER, R. VAN COILLIE, 1982. Sensibilité à l'acidification de quatre rivières à saumons de la Côte-Nord du Saint-Laurent (Québec). Can. Tech. Rep. Fish. Aquat. Sci. 1109F. 56 p.
- 1434 BROUSSEAU, C.S., D. BACCANTE, L.W. MAKI, 1985. Role of bedrock and surficial geology in determining the sensitivity of Thunder Bay area Canada lakes to acidification. J. Great Lakes Res. 11(4): p. 501 - 507.
- 102 BROWN, D.J.A., K. SADLER, 1981. The chemistry and fishery status of acid lakes in Norway and their relationship to european sulphur emissions. Journal of Applied Ecology 18: p. 433 - 441.
- 360 BUDD, W.W., A.H., JOHNSON, J.B. HUSS, R.S. TURNER, 1981. Aluminum in Precipitation, Streams, and Shallow Groundwater in the New Jersey Pine Barrens. Water Resources Research 17(4): p. 1179 - 1183.
- 432 BURNS, D.A., J.N. GALLOWAY, G.R. HENDREY. 1981. Acidification of surface waters in two areas of the Eastern United States. Water, Air and Soil Pollution, 16(3): p. 277 - 285.
- 1631 CADLE, S.H., J.M. DASCH, 1987. Composition of snowmelt and runoff in northern Michigan. Environ. Sci. Technol. 21(3): p. 295 - 299.
- 1184 CADLE, S.H., J.M. DASCH, N.E. GROSSNICKLE, 1984. Retention and release of chemical species by a northern Michigan snowpack. Water, Air, and Soil Pollution 22(3): p. 303 - 319.
- 723 CAMPBELL, P.G.C., M. BISSON, J. BOISVERT, R. BOUGIE, A. TESSIER, J.P. VILLENEUVE, 1982. Méthodologie analytique pour déterminer la spéciation de l'aluminium dans les eaux lacustres en voie d'acidification. INRS-Eau, rapport scientifique no 145, pour Environnement Canada, Direction générale des eaux intérieures, région du Québec. 113 p.

(section 3. 2)

- 727 CANADA. ENVIRONNEMENT CANADA, 1982. Arguments pour la délimitation de l'étendue du réseau TADPA pour les eaux de surface. Direction générale des eaux intérieures, région du Québec. 12 p.
- 189 CANADA. ENVIRONNEMENT CANADA. 1979. Water Quality Interpretive Report, Ontario, 1967-1977. Inland Waters Directorate, Water Quality Branch, Ottawa: 67 p.
- 992 CANFIELD, Jr, D.E., 1983. Sensitivity of Florida lakes to acidic precipitation. Water Resources Research 19(3): p. 833 - 839.
- 1438 CARIGNAN, R., 1985. Quantitative importance of alkalinity flux from the sediments of acid lakes. Nature 317(6033): p. 158 - 160.
- 1439 CARIGNAN, R., A. TESSIER, 1985. Zinc deposition in acid lakes; the role of diffusion. Science 228(4707): p. 1524 - 1526.
- 1440 CARIGNAN, R., J.O. NRIAGU, 1985. Trace metal deposition and mobility in the sediments of two lakes near Sudbury, Ontario, Canada. Geochimica et Cosmochimica Acta 49(8): p. 1753 - 1764.
- 1600 CARON, F., 1984. Evaluation, à l'aide des mesures des rapports des isotopes stables du soufre et de l'oxygène, de la proportion des sulfates mesurés dans les lacs attribuable aux dépôts atmosphériques. Université du Québec, Institut National de la Recherche Scientifique, Mémoire de maîtrise. 100 p.
- 279 CARRICK, T.R., 1979. The effect of acid water on the hatching of salmonid eggs. J. Fish. Biol. 14: p. 165 - 172.
- 37 CARRITHERS, R.B., F.J. BULOW, 1973. An Ecological Survey of the West Fork of the Obey River, Tennessee with Emphasis on the Effects of Acid Mine Drainage. Journal of the Tennessee Academy of Science 48(2): p. 65 - 72.
- 543 CARTER, J.C.H., 1971. Distribution and Abundance of planktonic Crustacea in ponds near Georgian Bay (Ontario, Canada) in relation to hydrography and water chemistry. Arch. Hydrobiol. 68(2): p. 204 - 231.

(section 3. 2)

- 1443 CHALANCHUK, S.M., 1985. Recruitment growth and condition of a population of the white sucker *Catostomus commersoni* in lake 223, an experimentally acidified lake. Can. Tech. Rep. Fish. Aquat. Sci. 1396: p. I - IV, 1 - 18.
- 135 CHARETTE, J.-Y., 1981. Observations préliminaires sur l'impact potentiel des précipitations acides sur la faune ichtyenne du parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures. Région du Québec. 17 p.
- 1021 CHARETTE, J.-Y., D. LAFLAMME, G. ROBITAILLE, 1983. Modification de la qualité des eaux de surface au lac Laflamme, forêt Montmorency, Québec, au cours de la fonte printanière de 1982. Environnement Canada, Direction générale des eaux intérieures, région du Québec (rapport préliminaire)
- 1581 CHARETTE, J.-Y., H.G. JONES, W. SOCHANSKA, J.M. GAUTHIER, 1984. Changes in lake water quality during spring runoff in a northern boreal forest subjected to acidic precipitation. Canadian Hydrology Symposium, University Laval, Sainte-Foy, Quebec. June 10-12, 1984. 21 p.
- 540 CHARETTE, J.-Y., M. LAGACE, 1981. Sommaire du résultat préliminaire des travaux sur l'impact des précipitations acides sur la faune piscicole du Québec (octobre 1980-janvier 1981). Gouvernement du Québec. 18 p.
- 694 CHEN, C.W., M. ASCE, J.D. DEAN, S.A. GHERINI, R.A. GOLDSTEIN, 1982. Acid rain model: Hydrologic module. J. Environ. Eng. Div. (Proc. Am. Soc. Civ. Eng.) 108(EE3): p. 455 - 472.
- 1017 CHESTER, P.F., 1981. Acid rain, SO<sub>2</sub>, emissions and fisheries. IEEE Power Engineering Society. Special publication (20): p. 13 - 18.
- 1054 CHESTER, P.F., 1983. Acid rain, catchment characteristics and fishery status. Wat. Sci. Tech. 15(12): p. 47 - 58.
- 1335 CHEVALIER, G., L. GAUTHIER, G. MOREAU, 1985. Histopathological and electron microscopic studies of gills of brook trout, *Salvelinus fontinalis* from acidified lakes. Can. J. Zool. 63(9): p. 2062 - 2070.
- 920 CHRISTOPHERSEN, N., H.M. SEIP, R.F. WRIGHT, 1982. A model for streamwater chemistry at Birkenes, Norway. Water Resources Research 18(4): p. 977 - 996.

(section 3. 2)

- 145 CHRISTOPHERSEN, N., R.F. WRIGHT, 1981. Sulfate Budget and a Model for Sulfate Concentrations in Stream Water at Birkenes, a Small Forested Catchment in Southernmost Norway. Water Resources Research 17(2): p. 377 - 389.
- 1139 CHURCH, M.R., J.N. GALLOWAY, 1984. Application of Henriksen's "acidification indicator" and "predictor nomograph" to two Adirondack lakes. Water, Air and Soil Pollution 22(2): p. 111 - 120.
- 1187 CLAIR, T.A., 1984. Aluminum speciation in waters of Nova Scotia and their impact on Water Quality Branch analytical and field methods. IWD-AR-WQB-84-69, Environment Canada, Inland Waters Directorate, Moncton, N.B. 28 p.
- 132 CLAIR, T.A., D.R. ENGSTROM, 1982. Sensitivity of Surface Waters of Newfoundland and Labrador to Acid Precipitation. Water Quality Branch, Environment Canada, Moncton, N.B. 36 p.
- 746 CLAIR, T.A., P.H. WHITFIELD, 1983. Trends in pH, calcium and sulfate of rivers in Atlantic Canada. Limnol. Oceanogr., 28(1): p. 160 - 165.
- 137 CLAIR, T.A., J.P. WITTEMAN, S.H. WHITLOW, 1982. Acid Precipitation Sensitivity of Canada's Atlantic Provinces. Inland Waters Directorate Technical Bulletin no 124, Environment Canada, Ottawa. 23 p.
- 1445 COHEN, M., 1985. The leaching of heavy metals from soils due to acid rain and its effect on the aquatic ecosystem. Bull. N.J. Acad. Sci. 30(2): p. 94.
- 437 COKER, W.B., W.W. SHILTS, 1979. Lacustrine geochemistry around the north shore of lake Superior: Implications for evaluation of the effects of acid precipitation. In: Current Research, Part C, Geological Survey of Canada, Paper 79-1C. p. 1 - 15.
- 1301 COLLINS, T.M., P.A. LANE, 1984. Plankton of an acid-stressed lake (Kejimikujik National Parc, Nova Scotia, Canada). Part I. Design and water chemistry results of an enclosure experiment. Verh. Internat. Verein. Limnol. 22: p. 395 - 400.

(section 3. 2)

- 73 CONROY, N., D.S. JEFFRIES, J.R. KRAMER, 1974. Acid Shield Lakes in the Sudbury Ontario Region. Water Pollution Research in Canada Proc. 9th Canadian Symp. 9: p. 45 - 61.
- 219 CONROY, N., K. HAWLEY, W. KELLER, C. LAFRANCE, 1976. Influences of the Atmosphere on Lakes in the Sudbury Area. Journal of Great Lakes Research 2: p. 146 - 165.
- 152 CONROY, N., L. MAKI, 1974. Extensive and Intensive Lake Studies in the Sudbury Area. Ontario Industrial Waste Conference: p. 138 - 143.
- 581 CONWAY, H.L., G.R. HENDREY, 1981. Ecological effects of acid precipitation on primary producers. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31-April 3, 1981. Michigan State University, Michigan. 22 p.
- 1098 COOK, R.B., D.W. SCHINDLER, 1983. The biogeochemistry of sulfur in an experimentally acidified lake. Ecol. Bull. 35: p. 115 - 127.
- 1399 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.E. WRIGHT, 1985. Time scales of catchment acidification. A quantitative model for estimating freshwater acidification. Environ. Sci. Technol. 19(12): p. 1144 - 1149.
- 1336 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.F. WRIGHT, 1985. Modeling the effects of acid deposition: Assessment of a lumped parameter model of soil water and stream chemistry. Water Resour. Res. 21(1): p. 51 - 63.
- 1612 COURCHESNE, F., W. HENDERSHOT, 1987. Potentiel d'adsorption et de désorption des sulfates dans les horizons supérieurs du sol au Bassin du Lac Laflamme. Environnement Canada, Direction des eaux intérieures, Région du Québec. 35 p.
- 387 CRAIG, G.R., W.F. BAKSI, 1977. The effects of depressed pH on Flagfish reproduction, Growth and survival. Water Research, 11(8): p. 621 - 626.
- 125 CRISMAN, T.L., P.L. BREZONIK, 1980. Acid rain - Threat to sensitive aquatic ecosystems. Proc. 73rd Annu. Meet.-Air Pollut. Control Assoc. June 22-27, 1980, Paper 80-24.3. 22 p.

(section 3. 2)

- 1356 CRONAN, C.S., 1985. Biogeochemical influence of vegetation and soils in the ILWAS watersheds. Water Air Soil Pollut. 26(4): p. 355 - 372.
- 146 CRONAN, C.S., C.L. SCHOFIELD, 1979. Aluminum leaching response to acid precipitation: effects on high - elevation watersheds in the Northeast. Science, 204: p. 304 - 306.
- 1563 DAHL, J.B., C. QVENILD, O. TOLLAN, N. CHRISTOPHERSEN, H.M. SEIP, 1980. Use of radioactive tracers to study runoff and soil-water interactions in natural mini-catchments. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 160 - 161.
- 526 DAVIS, A.O., J.N. GALLOWAY, D.K. NORDSTROM. 1982. Lake acidification: Its effect on lead in the sediment of two Adirondack lakes. Limnol. Oceanogr., 27(1): p. 163 - 167.
- 1449 DAVIS, R.B., D.S. ANDERSON, F. BERGE, 1985. Paleolimnological evidence that lake acidification is accompanied by loss of organic matter. Nature 316(6027): p. 436 - 438.
- 266 DE COSTA, J., A. JANICKI, 1978. Population dynamics and age structure of Bosmina longirostris in an acid Water impoundment. Verh. Internat. Verein. Limnol. 20: p. 2479 - 2483.
- 267 DE COSTA, J., 1975. The crustacean plankton of an acid reservoir. Verh. Internat. Verein. Limnol. 19: p. 1805 - 1813.
- 1451 DEANO, P. M., J.W. ROBINSON, 1985. The effect of decaying leaves on the pH and buffer capacity of waters. J. Environ. Sci. Health part A. Environ. Sci. Eng. 20(8): p. 903 - 912.
- 563 DEL PRETE, A., C. SCHOFIELD. 1981. The utility of diatom analyses of lake sediments for evaluating acid precipitation effects on dilute lakes. Arch. Hydrobiol., 91(3): p. 332 - 340.

(section 3. 2)

- 1606 DELISLE, C.E., M.A. BOUCHARD, P. ANDRE, 1984. Les précipitations acides et leurs effets au nord du 55ème parallèle du Québec. Ecole Polytechnique de Montréal et l'Université de Montréal. Rapport présenté à la fondation canadienne Donner. Janvier 1984. 134 p.
- 1080 DELISLE, C.E., P. BILODEAU, L. ROY, P. ANDRE, 1983. Acidification artificielle en enclos limniques au lac Kempt: Résultats préliminaires. Sciences et Techniques de l'eau, 16(4): p. 367 - 369.
- 1076 DELISLE, E., G. BENOIT, L. ROY, P. BILODEAU, P. ANDRE, 1983. Heavy metals in acid precipitations and effects of simulated acidification on plankton. VDI-Berichte 500. p. 373 - 376.
- 1421 DELORME, L.D., S.R. ESTERBY, H. DUTHIE. 1984. Prehistoric pH trends in Kejimikujik lake, Nova Scotia. Int. Rev. Gesamten Hydrobiol 69(1): p. 41 - 55.
- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 679 DePINTO, J.V., R.F. GUMINIAC, R.S. HOWELL, J.K. EDZWALD, 1980. Use of microcosms to evaluate acid lake recovery techniques. Giesy, J.P. (ed). DOE Symposium Series, Vol. 52. Microcosms in Ecological Research; Papers from a Symposium, Augusta, U.S.A. Nov. 8-10, 1978. p. 562 - 582.
- 1452 DERMOTT, R.M., 1985. Benthic fauna in a series of lakes displaying a gradient of pH. Hydrobiologia 128(1): p. 31 - 38.
- 1613 DESCHENES, J., J.P. VILLENEUVE, 1985. Modeling the hydrologic cycle: The MC model. Nordic Hydrology 16: p. 273 - 290.
- 1632 DESGRANGES, J.-L., M. DARVEAU, 1985. Effect of lake acidity and morphometry on the distribution of aquatic birds in southern Quebec. Holartic Ecology 8: p. 181 - 190.
- 1638 DESGRANGES, J.-L., J. RODRIGUE, 1986. Influence of acidity and competition with fish on the development of ducklings in Quebec. Water, Air, and Soil Pollution 30(1986): p. 743 - 750.

(section 3. 2)

- 1453 DETHIER, D.P., S.B. JONES, 1985. Atmospheric and weathering contributions to stream chemistry northwestern Massachusetts, USA. Northeast Environ. Sci. 4(1): p. 8 - 17.
- 1138 DICKMAN, M., S. DIXIT, J. FORTESCUE, B. BARLOW, J. TERASMAE, 1984. Diatoms as indicators of the rate of lake acidification. Water, Air, and Soil Pollution 21(1-4): p. 375 - 386.
- 1357 DICKMAN, M.D., H.G. THODE, 1985. The rate of lake acidification in four lakes north of Lake Superior, Canada, USA, and its relationship to downcore sulfur isotope ratios. Water, Air, and Soil Pollution 26(3): p. 233 - 254.
- 405 DICKSON, W. 1978. Some effects of the acidification of Swedish lakes. International association of theoretical & applied limnology, 20: p. 851 - 856.
- 789 DICKSON, W., 1982. Survey of acidification of scandinavian freshwater systems; water chemistry of (airborne) NOx. In: Air Pollution by Nitrogen Oxides. Schneider, T. et L. Grant (eds). Amsterdam: Elsevier Scientific Publishing, p. 555 - 565.
- 425 DILLON, P.J., N.D. YAN. W.A. SCHEIDER, N. CONROY, 1977. Acidic Lakes in Ontario: Characterization, Extent, and Responses to Base and Nutrient Additions. Ontario Ministry of the Environment. 39 p.
- 466 DODSON, S.I. 1982. Chemical and biological limnology of six west-central Colorado Mountain Ponds and their susceptibility to acid rain. The American Midland Naturalist, 107(1): p. 137 - 179.
- 292 DOVLAND, H., A. SEMB, 1978. Deposition and runoff of sulphate in the Tovdal river. A study of the mass balance for September 1974 - August 1976, SNSF - Project, rapport IR 38/78, Oslo, 22 p.
- 790 DRISCOLL, C.T. et G.E. LIKENS, 1982. Hydrogen ion budget of an aggrading forested ecosystem. Tellus, 34(3): p. 283 - 292.
- 1358 DRISCOLL, C.T., 1985. Aluminum in acidic surface waters chemistry transport and effects. Environ. Health Perspect. 63: p. 93 - 104.

(section 3. 2)

- 1616 DRISCOLL, C.T., G.C. SCHAFRAN, 1984. Short-term changes in the base neutralizing capacity of an acid Adirondack lake, New York. Nature 310: p. 308 - 310.
- 995 DUFRESNE, A., H. LALANDE, W.H. HENDERSHOT, 1984. Mobilité et spéciation de l'aluminium. Région des basses Laurentides. Rapport d'étape présenté à Environnement Canada, Direction générale des eaux intérieures, Département de géographie, Université de Montréal. 68 p.
- 1067 DUMAS, J.P., L. PAZDERNIK, 1983. Variations saisonnières des composantes de l'alcalinité des eaux dans le haut-estuaire du fleuve Saint-Laurent (Québec). Water, Air, and Soil Pollution 20(4): p. 413 - 424.
- 1315 DUPONT, J., 1984. Etude de la physico-chimie de 22 lacs du parc de la Vérendrye en rapport avec les processus d'acidification des eaux lacustres. Ministère de l'Environnement du Québec, Direction des relevés aquatiques, PA-13. 74 p.
- 1134 DUPONT, J., 1984. Nature et étendue de l'acidification de 64 lacs de la région de Rouyn - Noranda. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-9. 127 p.
- 1209 DUPONT, J., 1984. Nature et étendue de l'acidification de 97 lacs de la région de Portneuf. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-10, 113 p.
- 1593 DUPONT, J., 1988. Etat de l'acidité des lacs de la région hydrographique de l'Outaouais. Gouvernement du Québec, Ministère de l'environnement, Direction de la qualité du milieu aquatique. Publication PA-29. Mars 1988. 99p.
- 293 EDWARDS, D.J., S. HJELDNES, 1977. Growth and survival of salmonids in water of different pH. SNSF-Project, rapport FR 10/77, Oslo: 12 p.
- 1061 EILERS, J.M., G.E. GLASS, K.E. WEBSTER, J.A. ROGALLA, 1983. Hydrologic control of lake susceptibility to acidification. Can. J. Fish. Aquat. Sci. 40(11): p. 1896 - 1904.
- 499 EILERS, J.M., R. BERG, G.E. GLASS, 1981. Sensitivity Of Aquatic Organisms to Acidic Environments. U.S. Environmental Protection Agency, Environmental Research Laboratory-Duluth, Minnesota. 50 p.

(section 3. 2)

- 1202 ELDER, F.C., 1984. Effets du nitrate sur l'acidification du milieu aquatique. Rapport SPE 2/TS/1, Environnement Canada, Service de la protection de l'environnement. 14 p.
- 1325 ELLGAARD, E.G., J.Y. GILMORE III, 1984. Effects of different acids on the bluegill sunfish, *Lepomis macrochirus Rafinesque*. J. Fish. Biol. 25(2): p. 133 - 137.
- 1120 ELZERMAN, A.W., 1983. Effects of acid deposition (rain) on a Piedmont aquatic ecosystem: Acid inputs, neutralization and pH changes. Clemson University, Final Technical Completion Report to Bureau of Reclamation U.S. Department of the Interior, Washington, Project no. B-141-SC. 79 p.
- 1456 ENGBLOM, E., F.E. LINGDELL, 1984. The mapping of short-term acidification with the help of biological indicators. Inst. Freshwater Res. Drottningholm Rep. 61: p. 60 - 68.
- 1337 ERICKSON, R.J., 1985. An evaluation of mathematical models for the effects of pH and temperature on ammonia toxicity to aquatic organisms. Water Resources 19(8): p. 1047 - 1058.
- 207 ERIKSSON, E., 1981. Aluminium in Groundwater Possible Solution Equilibria. Nordic Hydrology 12(1): p. 43 - 50.
- 1338 ESHLEMAN, K.N., H.F. HEMOND, 1985. The role of organic acids in the acid-base status of surface waters at Bickford watershed, Massachusetts. Water Resources Research 21(10): p. 1503 - 1510.
- 1186 FAUST, S.D., 1983. Total alkalinity versus buffer value (capacity) as a sensitivity indicator for fresh waters receiving acid rain. J. Environ. Sci. Health, A18(5): p. 701 - 711.
- 912 FAUST, S.D., A. MCINTOSH, 1983. Buffer capacities of fresh water lakes sensitive to acid rain deposition. Journal of Environmental Science and Health A-18(1): p. 155 - 161.
- 1457 FAUST, S.D., R. SCHMIDT, 1985. Geochemical control of hydrogen ion in lakes receiving acidic deposition. J. Environ. Sci. Health part A. Environ. Sci. Eng. 20(6): p. 599 - 616.

(section 3. 2)

- 1170 FAVA, J.A., R.M. KAPP, W.J. RUE Jr., 1982. Evaluation of ammonia toxicity in site-specific environmental assessments. Proceedings of the 4th annual meeting of the international society of petroleum industry biologists, Denver, Colo., U.S.A. Sept. 22-25, 1981. Rand, P.J., (d). Butterworths, Ltd. p. 319 - 337.
- 1051 FERRONI, G.D., L.G. LEDUC, C.G. CHOQUET, 1983. Preliminary studies on the use of the heterotrophic activity method to evaluate acid-stress effects in aquatic environments. Water Research 17(10): p. 1379 - 1384.
- 382 FIANCE, S.B., 1978. Effects of pH on the biology and distribution of Ephemera funeralis (Ephemeroptera). Oikos, 31(3): p. 332 - 339.
- 142 FICKE, J.F., 1977. Air pollution: Impact on Water. Proc. of the 32nd annual meeting, Soil Conservation Society of America. Aug. 7 - 10, 1977. p. 208 - 211.
- 408 FISHER, D.W., A.W. GAMBELL, G.E. LIKENS, F.H. BORMANN, 1968. Atmospheric Contributions to Water Quality of Streams in the Hubbard Brook Experimental Forest, New-Hampshire. Water Resources Research 4(5): p. 1115 - 1126.
- 1571 FONTAINE III, T.D., 1984. A non-equilibrium approach to modeling metal speciation in acid, aquatic systems: theory and process equations. Ecological Modelling, 21: p. 287 - 313.
- 1400 FOSTER, N.W., 1985. Acid precipitation and soil solution chemistry within a maple-birch forest in Canada. For. Ecol. Manage. 12(3-4): p. 215 - 232.
- 829 FRASER, G.A., H.H. HARVEY, 1982. Elemental composition of bone from white sucker (Catostomus commersoni) in relation to lake acidification. Canadian Journal of Fisheries and Aquatic Sciences, 39(9): p. 1289 - 1296.
- 1576 FREEDMAN, B., T.A. CLAIR. 1986. Ion mass balances and seasonal fluxes from four acidic brownwater streams in Nova Scotia. Environment Canada, Inland Waters Directorate, Atlantic Region. Moncton, N.B. Report no. IWD-AR-WQB-86-98. 35 p.

(section 3. 2)

- 1304 FURUTANI, A., J.W.M. RUDD, C.A. KELLY, 1984. A method for measuring the response of sediment microbial communities to environmental perturbations. Can. J. Microbiol. 30(11): p. 1408 - 1414.
- 144 GALLOWAY, J.N., 1977. Air Pollution: Impact on aquatic ecosystems. Proc. of the 32nd Annual Meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 211 - 215.
- 1362 GHERINI, S.A., L. MOK, R.J.M. HUDSON, G.F. DAVIS, C.W. CHEN, R.A. GOLDSTEIN, 1985. The ILWAS model; formulation and application. Water Air Soil Pollut. 26(4): p. 425 - 460.
- 588 GJESSING, E.T. 1981. The effect of aquatic humus on the biological availability of cadmium. Arch. Hydrobiol., 91(2): p. 144 - 149.
- 413 GJESSING, E.T., 1974. Effects of Polluted Precipitation on Water Quality. In: Seventh International Conference on Water Pollution Research, Paris: p. 725 - 731.
- 155 GJESSING, E.T., A. HENRIKSEN, M. JOHANNESSEN, R. WRIGHT, 1976. Effects of Acid Precipitation on Freshwater Chemistry. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(ed.). Research Report 6/76 p. 65 - 85.
- 1461 GLASS, G.E., O.L. LOUCKS, 1986. Implications of a gradient in acid and ion deposition across the northern Great Lakes states, USA. Environ. Sci. Technol. 20(1): p. 35 - 43.
- 443 GLASS, N.R., D.E. ARNOLD, J.N. GALLOWAY, G.R. HENDREY, J.J. LEE, W.W. McFEE, S.A. NORTON, C.F. POWERS, D.L. RAMBO, C.L. SCHOFIELD. 1982. Effects of acid precipitation. Environmental Science and Technology, 16(3): p. 162A - 169A.
- 359 GLOVER, G.M., A.H. WEBB, 1979. Weak and strong acids in the surface waters of the Tovdal region in S. Norway. Water Research 13 (8): p. 781 - 783.
- 1363 GOLSTEIN, R.A., C.W. CHEN, S.A. GHERINI, 1985. Integrated lake-watershed acidification study; summary. Water Air Soil Pollut. 26(4): p. 327 - 338.

(section 3. 2)

- 719 GORDON, D.C., P.D. KEIZER, J.G. OGDEN III, J. UNDERWOOD, J.F. WILTSHIRE, 1981. Synoptic water quality study of 50 lakes in the Halifax, Nova Scotia, Metro area on 14 April 1980. Bedford Institute of Oceanography, Report series /B1-R-81-5, 85 p.
- 404 GORHAM, E., 1967. Some Chemical Aspects of Wetland Ecology. Nat. Res. Council Canada, Assoc. Comm. on Geotech. Res., Tech. Memo no 90: p. 20 - 38.
- 38 GORHAM, E., A.G. GORDON, 1960. The Influence of Smelter Fumes Upon the Chemical Composition of Lake Waters Near Sudbury, Ontario, and Upon Surrounding Vegetation. Canadian Journal of Botany 38: p. 477 - 487.
- 177 GORHAM, E., A.G. GORDON, 1963. Some Effects of Smelter Pollution upon Aquatic Vegetation near Sudbury, Ontario. Canadian Journal of Botany 41: p. 371 - 378.
- 1228 GORHAM, E., S.E. BAYLEY, D.W. SCHINDLER, 1984. Ecological effects of acid deposition upon peatlands: A neglected field in "acid-rain" research. Can. J. Fish. Aquat. Sci. 41(8): p. 1256 - 1268.
- 1463 GORHAM, E., S.J. EISENREICH, J. FORD, M.V. SANTELMANN, W. STUMM, 1985. The chemistry of bog waters. Chem. Processes Lakes p. 339 - 363.
- 186 GRAHN, O., 1977. Macrophyte Succession in Swedish Lakes Caused by Deposition of Airborne Acid Substances. Water, Air and Soil Pollution 7 (3): p. 295 - 305.
- 410 GRAHN, O., H. HULTBERG, 1975. The Neutralizing capacity of 12 different lime products used for pH - adjustment of acid water. Vatten, 2: p. 120 - 132.
- 527 GRANDE, M., I.P. MUNIZ, S. ANDERSEN, 1978. Relative tolerance of some salmonids to acid waters. Verh. Internat. Verein. Limnol. 20: p. 2076 - 2084.
- 409 GRANDE, M., S. ANDERSEN, 1979. Toxicity of Acid Snowmelt Water to Brown Trout (Salmo trutta L.). Vatten, 1: p. 27 - 32.
- 1313 GRAY, J.E., J.R.M. KELSO, 1984. An examination of historical lake and stream chemistry in north-central Ontario - can case histories document acidification?. Can. Tech. Rep. Fish. Aquat. Sci. 1223. 38 p.

(section 3. 2)

- 557 GRIMARD, Y., 1981. Contribution à l'étude de la vulnérabilité des eaux lacustres québécoises face à l'acidification des précipitations. Ministère de l'environnement du Québec, Service de la qualité des eaux. Rapport 81-6. 38 p.
- 610 GROTERUD, O., 1981. The dynamics of acidification from a new view elucidated by studies in a lake area in Norway. Verh. Internat. Verein. Limnol., 21: p. 406 - 411.
- 1300 GROTERUD, O., 1984. A conceptual model of lake acidification. Verh. Internat. Verein. Limnol. 22: p. 686 - 691.
- 366 GUNN, J.M., W. KELLER, 1980. Enhancement of the Survival of Rainbow Trout (Salmo gairdneri) Eggs and Fry in an Acid Lake through Incubation in Limestone. Can. J. Fish. Aquat. Sci., 37: p. 1522 - 1530.
- 516 GUNN, J.M., W. KELLER. 1981. Emergence and survival of lake trout (Salvelinus namaycush) and brook trout (S. fontinalis) from artificial substrates in an acid lake. Ontario fisheries technical report series, (1): 9 p.
- 1602 GUNN, J.M., W. KELLER, 1984. Effects of ice and snow cover on the chemistry of nearshore lake water during spring melt. Annals of glaciology 1985 (in press). 27 p.
- 1603 GUNN, J.M., W. KELLER, 1984. In situ manipulation of water chemistry using crushed limestone and observed effects on fish. Fisheries 9(1): p. 19 - 24.
- 1283 GUNN, J.M., W. KELLER, 1984. Spawning site water chemistry and trout (Salvelinus namaycush) sac fry survival during spring snowmelt. Can. J. Fish. Aquat. Sci. 41: p. 319 - 329.
- 256 HAAPALA, H., P. SEPPONEN, E. MESKUS, 1975. Effect of spring floods on water acidity in the Kiiminkijoki area, Finland. Oikos 26 (1): p. 26 - 31.
- 726 HAEMMERLI, J., 1982. Rationalisation du réseau de qualité des eaux de surface (TADPA), Répartition spatiale des paramètres de qualité. Document de travail. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 54 p.

(section 3. 2)

- 961 HAEMMERLI, J., 1983. Principales caractéristiques du réseau TADPA de qualité des eaux de surface - volet québécois. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 9 p.
- 88 HAGEN, A., A. LANGE LAND, 1973. Polluted Snow in Southern Norway and the Effect of the Meltwater on Freshwater and Aquatic Organisms. Environmental Pollution 5: p. 45 - 57.
- 1466 HAINES, T.A., C.H. JAGOE, S.J. PAUWELS, 1985. Fish species distribution as a function of lake acidity in the northeastern USA. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 82 - 95.
- 1127 HAINES, T.A., J. AKIELASZEK, 1983. A regional survey of the chemistry of headwater lakes and streams in New England: Vulnerability to acidification. Report for: Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. FWS/OBS-80/40.15; PB84-103357. 141 p.
- 196 HALL, R.J., G.E. LIKENS, 1981. Chemical flux in an acid-stressed stream. Nature 292(5821): p. 329 - 331.
- 578 HARGREAVES, J.W., E.J.H. LLOYD, B.A. WHITTON, 1975. Chemistry and Vegetation of Highly Acidic Streams. Freshwat. Biol. 5: p. 563 - 576.
- 517 HARP, G.L., R.S. CAMPBELL, 1967. The distribution of Tendipes plumosus (Linn) in mineral acid water. Limnology and Oceanography 12(4): p. 260 - 263.
- 652 HARRIMAN, R., B.R.S. MORRISON, 1982. Ecology of streams draining forested and non-forested catchments in an area of central Scotland subject to acid precipitation. Hydrobiologia, 88(3): p. 251 - 263.
- 482 HARRIMAN, R., B.R.S. MORRISON. 1981. Forestry, fisheries and acid rain in Scotland. Scottish Forestry, 35(2): p. 89 - 95.
- 1365 HARTE, J., G.P. LOCKETT, R.A. SCHNEIDER, H. MICHAELS, C. BLANCHARD, 1985. Acid precipitation and surface-water vulnerability on the western slope of the High Colorado USA Rockies. Water Air Soil Pollut. 25(3): p. 313 - 320.

(section 3. 2)

- 1126 HARTE, J., J. HOLDREN, K. TONNESSON, 1983. The potential for acid-precipitation damage to lakes of the Sierra Nevada, California. University of California, 1th, 16: p. 164 - 169.
- 131 HARVEY, H.H., 1975. Fish Populations in a Large Group of Acid-stressed lakes. Verh Internat. Véréin. Limnol. 19: p. 2406 - 2417.
- 446 HARVEY, H.H., 1979. The acid deposition problem and emerging research needs in the toxicology of fishes. Proc. Fifth Annual Aquatic Toxicity Workshop, Hamilton, Ontario, Nov. 7-9, 1978. Fish. Mar. Serv. Tech. Rep. 862: p. 115 - 128.
- 1340 HAVAS, M., G.E. LIKENS, 1985. Toxixity of aluminum and hydrogen ions to Daphnia catawba, Holopedium gibberum, Chaoborus punctipennis and Chironomus anthracinus from Mirror Lake, New Hampshire, USA. Can. J. Zool. 63(5): p. 1114 - 1119.
- 794 HAVAS, M., T.C. HUTCHINSON, 1983. The Smoking Hills: natural acidification of an aquatic ecosystem. Nature, 301(5895): p. 23 - 27.
- 1261 HAVAS, M., T.C. HUTCHINSON, G.E. LIKENS, 1984. Red herrings in acid rain research. Environ. Sci. Technol. 18(6): p. 176A - 186A.
- 1168 HEISKARY, S.A., M.E. HORA, J.D. THORNTON, 1982. Acid precipitation impact assessment in Minnesota derived from current and historical data. In: Energy and Environmental Chemistry. Keith, L.H., (ed.), Ann Arbor Science Publisher Inc., Ann Arbor, Mich., U.S.A. p. 147 - 175.
- 715 HELVEY, J.D., J.HUBBARD, D.R. De WALLE, 1982. Time trends in pH and specific conductance of streamflow from an undisturbed watershed in the central Appalachians. In: Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées. Fredericton, 14-15 juin 1982, p. 637 - 651.
- 1627 HENDERSHOT, W.H., F. COURCHESNE, C. LAPIERRE, L. MENDES, S. SAVOIE, H. LALANDE, 1986. Contribution of the surface horizons of podzols to the quality of surface waters during spring snowmelt. Environment Canada, Inland Waters Directorate, Quebec Region. 59 p.

(section 3. 2)

- 1610 HENDERSHOT, W.H., H. LALANDE, A. DUFRESNE, 1984. Aluminum speciation and movement in three small watersheds in the southern Laurentians. Water Poll. Res. J. Canada 19(1): p. 11 - 26.
- 1626 HENDERSHOT, W.H., H. LALANDE, A. DUFRESNE, C. LAPIERRE, F. COURCHESNE, 1984. Aluminum chemistry in soil solutions and surface waters. McGill University, Department of Renewable Resources, Macdonald College. Pedology Research Group Scientific Report No. 1. 55 p.
- 1124 HENDREY, G.R., 1982. Acid precipitation effects on algal productivity and biomass in Adirondack lakes: A completion report. Center for Environmental research, Cornell University, Ithaca, N.Y. PB83-17320 3. 8 p.
- 1605 HENDREY, G.R., J.N. GALLOWAY, C.L. SCHOFIELD, 1980. Temporal and spatial trends in the chemistry of acidified lakes under ice cover. In: Ecological impact of acid precipitation. Proceedings of an international conference, Sandefjord, Norway, March 11-14, 1980. D. Drablos and A. Tollan, Ed. SNSF project. p. 266 - 267.
- 674 HENDREY, G.R., J.N. GALLOWAY, S.A. NORTON, C.L. SCHOFIELD, P.W. SHAFFER, D.A. BURNS, 1980. Geological and hydrochemical sensitivity of the eastern United States to acid precipitation. Brookhaven National Laboratory; Upton, N.Y.; U.S. Environmental Protection Agency, EPA-600/3-80-024. 90 p.
- 227 HENDREY, G.R., R.F. WRIGHT, 1975. Acid Precipitation in Norway: Effects on Aquatic Fauna. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of lake Waters. Intern. Assoc. Great Lakes Res. 28 sept. / 1 oct. 1975, Orillia, Ontario. p. 192 - 207.
- 1145 HENDREY, G.R., N.D. YAN, K.J. BAUMGARTNER, 1981. Responses of freshwater plants and invertebrates to acidification. In: Restoration of Lakes and Inland Waters, United States Environmental Protection Agency, Washington, D.C. EPA 440/5-81-010. p. 457 - 466.
- 1262 HENDRY, C.D., P.L. BREZONIK, 1984. Chemical composition of softwater Florida lakes and their sensitivity to acid precipitation. Water Resources Bulletin 20(1): p. 75 - 86.

(section 3. 2)

- 1 HENRIKSEN, A., 1979. A simple Approach for Identifying and Measuring Acidification of Freshwater. Nature, April 1979, 278 p.
- 498 HENRIKSEN, A., 1980. Acidification of Freshwaters - A Large Scale Titration. Norwegian Institute for Water Research, Norway. 27p.
- 288 HENRIKSEN, A., H.M. SEIP, 1980. Strong and Weak Acids in Surface Waters of Southern Norway and Southwestern Scotland. Water Research 14 (7): p. 809 - 813.
- 1597 HENRIKSEN, A., L. LIEN, T.S. TRAAEN, I.S. SEVALDRUD, D.F. BRAKKE, 1988. Lake acidification in Norway: Present and predicted chemical status. Ambio 17(4): p. 259 - 266.
- 668 HENRIKSEN, A., R.F. WRIGHT, 1977. Effects of acid precipitation on a small acid lake in southern Norway. Nordic Hydrology 8: p. 1 - 10.
- 76 HENRIKSEN, A., R.F. WRIGHT, 1978. Concentrations of Heavy Metals in Small Norwegian Lakes. Water Research 12(2): p. 101 - 112.
- 750 HENRIKSON, L., J.B. OLOFSSON, H.G. OSCARSON, 1982. The impact of acidification on chironomidae (diptera) as indicated by subfossil stratification. Hydrobiologia 86(3): p. 223 - 229.
- 1297 HERCZEG, A.L., R.H. HESSLEIN, 1984. Determination of hydrogen ion concentration in softwater lakes using carbon dioxide equilibria. Geochimica et Cosmochimica Acta 48(4): p. 837 - 845.
- 463 HESSLEIN, R.H., 1979. Lake Acidification Potential in the Alberta Oil Sands Environmental Research Program Study Area. Alberta Oil Sands Environmental Research Program, 26 p.
- 1189 HESTHAGEN, T., 1982. A regional study on the environmental requirements of Gammarus lacustris G.O. Sars (Crustacea, Amphipoda) in Jotunheimen, Southern Norway. Fauna norv. Ser. A3: p. 26 - 30.
- 1239 HOBE, H., C.M. WOOD, B.R. McMAHON, 1984. Mechanisms of acid-base and ionoregulation in white suckers (Catostomus commersoni) in natural soft water. J. Comp. Physiol. B. 154(1): p. 35 - 46.

(section 3. 2)

- 1227 HOFFMANN, M., 1984. Recherches sur l'influence de l'eau de pluie sur les eaux phréatiques et les lacs de sablières. Verh. Internat. Verein. Limnol. 22(1): p. 277 - 280.
- 1471 HOHAM, R.W., W.W. MOHN, 1985. The optimum pH of four strains of acidophilic snow algae in the genus Chloromonas chlorophyta and possible effects of acid precipitation. J. Phycol. 21(4): p. 603 - 609.
- 1327 HOLCOMBE, G.W., G.L. PHIPPS, J.W. MARIER, 1984. Methods for conducting snail (Aplexa hypnorum) embryo through adult exposures: effects of cadmium and reduced pH levels. Arch. Environ. Contam. Toxicol. 13(5): p. 627 - 634.
- 1299 HOLDREN JR, G.R., T.M. BRUNELLE, G. MATISOFF, M. WAHLEN, 1984. Timing the increase in atmospheric sulphur deposition in the Adirondack Mountains. Nature 311: p. 245 - 248.
- 1205 HOOPER - REID, N.M., 1982. Lake pH trends in selected areas of Ontario. Ontario Hydro, Research division, Report no 82-248-K. 23 p.
- 1206 HOOPER - REID, N.M., 1982. Metallic element levels in 25 Sudbury area lakes. Ontario Hydro, Research division, Report no 82-273-K. 21 p.
- 1472 HOOPER, R.P., C.A. SHOEMAKER, 1985. Aluminum mobilization in an acidic headwater stream; temporal variation and mineral dissolution disequilibria. Science 229(4712): p. 463 - 465.
- 435 HORNBECK, J.W., G.E. LIKENS, 1974. The ecosystem concept for determining the importance of chemical composition of snow. In: Advanced Concepts and Techniques in the Study of Snow and Ice Resources. National Academy of Sciences, Washington, D.C., p. 139 - 151.
- 164 HORNBECK, J.W., G.E. LIKENS, J.S. EATON, 1977. Seasonal Patterns in Acidity of Precipitation and their Implications for Forest Stream Ecosystems. Water, Air and Soil Pollution 7: p. 355 - 365.
- 1473 HORNSTROM, E., C. EKSTROM, M.C. DURAINI, 1984. Effects of pH and different levels of aluminum on lake plankton in the swedish west coast area. Inst. Freshwater Res. Drottningholm Rep. 61: p. 115 - 127.

(section 3. 2)

- 1591 HOWELL, G., J.S.S. LAKSHMINARAYANA, 1986. The importance of water color in determining contemporary diatom assemblages and the implications on down-core pH reconstruction. Environment Canada, Inland Waters Directorate, Water Quality Branch, Moncton, N.B. 26 p.
- 1055 HOWELLS, G.D., 1983. Fishery status and water quality in areas affected by acid deposition. Wat. Sci. Tech. 15(12): p. 67 - 80.
- 1474 HOWELLS, G.D., 1985. Mechanisms and causes of fishery decline. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 62 - 81.
- 1099 HULSMAN, P.F., P.M. POWLES, J.M. GUNN, 1983. Mortality of walleye eggs and rainbow trout yolk-sac larvae in low-pH waters of the La Cloche mountain area, Ontario. Transactions of the American Fisheries Society 112(5): p. 680 - 688.
- 165 HULTBERG, H., 1977. Thermally stratified acid water in late winter - A key factor inducing self-accelerating processes which increase acidification. Water, Air, and Soil Pollution 7(3): p. 279 - 294.
- 1163 HULTBERG, H., 1983. Liming of acid-stressed ecosystems: Induced chemical and biological effects. VDI-Berichte 500: p. 409 - 414.
- 338 HULTBERG, H., O. GRAHN, 1976. Effects of acid Precipitation on Macrophytes in Oligotrophic Swedish Lakes. Proc. First Specialty Symposium on Atmospheric Contribution to the Chemistry of Lake Waters. Internat. Assoc. Great Lakes Res. Sept. 28 - Oct. 1, 1975: p. 208 - 221.
- 206 HULTBERG, H., S. JOHANSSON, 1981. Acid Groundwater. Nordic Hydrology 12(1): p. 51 - 64.
- 1573 JACKS, G., G. KNUTSSON, L. MAXE, A. FYLKNER, 1984. Effect of acid rain on soil and groundwater in Sweden. In: Pollutants in porous media. Springer-Verlag, New-York. B.Yaron, G.Dagan, J.Goldshmid eds. p. 94 - 114.
- 1240 JAGOE, C.H., T.A. HAINES, F.W. KIRCHEIS, 1984. Effects of reduced pH on three life stages of Sunapee char *Salvelinus alpinus*. Bull. Environ. Contam. Toxicol. 33(4): p. 430 - 439.

(section 3. 2)

- 268 JANICKI, A., J. DE COSTA, 1979. A multivariate analysis of the crustacean plankton community of an acid reservoir. Arch. Hydrobiol. 85(4): p.465 - 481.
- 639 JANSSON, M., H. OLSSON, O. BROBERG, 1981. Characterization of acid phosphatases in the acidified lake Gardsjon Sweden. Archiv Fuer Hydrobiologie, 92(3): p. 377 - 395.
- 830 JARVINEN, O., 1982. The acidification of precipitation in Finland. Luonnon Tutkija, 86(1): p. 7 - 10. (En finnois avec résumé en anglais).
- 97 JEFFRIES, D.S., C.M. COX, P.J. DILLON, 1979. Depression of pH in Lakes and Streams in Central Ontario during Snowmelt. Journal of the Fisheries Research Board of Canada 36 (6): p. 640 - 646.
- 964 JEFFRIES, D.S., R.G. SEMKIN, 1983. Changes in snowpack, stream, and lake chemistry during snowmelt in the Turkey lakes watershed. Turkey lakes watershed study. National Water Research Institute, Burlington, Ont. 24 p.
- 1223 JEFFRIES, D.S., W.A. SCHEIDER, W.R. SNYDER, 1984. Geochemical interactions of watersheds with precipitation in areas affected by smelter emissions near Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15), J.Nriagu (ed.). p. 195 - 241.
- 1607 JEFFRIES, D.S., W.R. SNYDER, 1981. Variations in the chemical composition of the snowpack and associated meltwaters in central Ontario. Proceedings of the Eastern Snow Conference, 38 Annual Meeting, Syracuse, N.Y. June 4-5, 1981. p. 11 - 22.
- 113 JENSEN, K.W., E. SNEKVIK, 1972. Low pH Levels Wipe out Salmon and Trout Populations in Southernmost Norway. Ambio 1(6): p. 223 - 225.
- 377 JERNELOV, A., 1980. The Effects of Acidity on the Uptake of Mercury in Fish. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23 1979: p. 211 - 222.

(section 3. 2)

- 225 JOHANNESSEN, M., T. DALE, E.T. GJESSING, A. HENRIKSEN, R.F. WRIGHT, 1975. Acid Precipitation in Norway: the regional distribution of contaminants in snow and the chemical concentration processes during snowmelt. In: Isotopes et impuretés dans les neiges et glaces. Actes du Colloque de Grenoble, août / septembre 1975. p. 116 -120.
- 1567 JOHANNESSEN, M., A. SKARTVEIT, R.F. WRIGHT, 1980. Streamwater chemistry before during and after snowmelt. In: Ecological impact of acid precipitation. Proceeding of an international conference. Sandefjord, Norway, March 11-14, 1980. D. Drablos and A. Tollan, (eds.). p. 224 - 225.
- 273 JOHANSSON, N., G. MILBRINK, 1976. Some Effects of Acidified Water on the Early Development of Roach (Rutilus rutilus L.) and Perch (Perca Fluviatilis L.). Water Resources Bulletin 12(1): p. 39 - 47.
- 264 JOHANSSON, N., P. RUNN, G. MILBRINK, 1977. Early Development of Three Salmonid Species in Acidified Water. Zoon 5(2): p. 127 - 132.
- 441 JOHNSON, A.H., 1979. Acidification of Headwater Streams in the New Jersey Pine Barrens. J. Environ. Qual., 8(3): p. 383 - 386.
- 1617 JOHNSON, A.H., R.C. REYNOLDS JR., 1977. Chemical character of headwater streams in Vermont and New Hampshire. Water Resources Research 13(2): p. 469 - 473.
- 140 JOHNSON, D.W., 1981. The natural acidity of some unpolluted waters in southeastern Alaska and potential impacts of acid rain. Water, Air and Soil Pollution 16(2): p. 243 - 252.
- 39 JOHNSON, D.W., D.A. WEBSTER, 1977. Avoidance of Low pH in Selection of Spawning Sites by Brook Trout (Salvelinus fontinalis). J. Fish. Res. Board Can. 34: p. 2215 - 2218.
- 1480 JOHNSON, M.G., 1985. Acidification of Georgian Bay rivers estimated by modification of the Wright-Henriksen model. J. Great Lakes Res. 11(2): p. 163 - 170.

(section 3. 2)

- 559 JOHNSON, N.M., C.T. DRISCOLL, J.S. EATON, G.E. LIKENS, W.H. McDOWELL. 1981. Acid rain. Dissolved aluminum and chemical weathering at the Hubbard Brook Experimental Forest, New-Hampshire. *Geochemica et Cosmochemica Acta*, 45(9): p. 1421 - 1437.
- 1589 JOHNSTON, L.M., D. CRAIG, D.J. BOTTOMLEY, 1985. Int raction des pluies acides et des eaux souterraines. *Sciences et Techniques de l'Eau* 18(2): p. 165 - 167.
- 1123 JONES, H.C., J.C. NOGGLE, R.C. YOUNG, J.M. KELLY, ET AL., 1983. Investigations of the cause of fishkills in fish-rearing facilities in Raven Fork watershed. Tennessee Valley Authority, Division of Air and Water Resources. 60 p.
- 1611 JONES, H.G., 1987. Chemical dynamics of snowcover and snowmelt in a boreal forest.In: Seasonal snowcovers - physics, chemistry, hydrology. D. Reidel Publishing Company, H.G. Jones and W.J. Orville-Thomas (eds.). p. 531 - 574.
- 1024 JONES, H.G., M. BISSON, 1980. Le lac Laflamme: Qualit  de l'eau et de la neige (hiver 1979-1980). INRS-Eau, rapport scientifique no 123 pour Environnement Canada, Direction g n rale des eaux int rieures, r gion du Qu bec. 91 p.
- 230 JONES, H.G., M. OUELLET, D.F. BRAKKE, 1980. The Evolution of Acidity in Surface Waters of Laurentides Park (Quebec, Canada) Over a Period of 40 Years. Proceedings International Conference on ecological impact of acid precipitation, Sandefjord, Norway, 11 - 14 March 1980, 8 p.
- 1329 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1985. Aspect qualitatif du d veloppement au bassin du lac Laflamme d'un mod le pr dictif de l'impact des pr cipitations acides - phase de la fonte printani re de 1984. INRS-EAU, rapport scientifique no. 182 pour Environnement Canada, Direction des eaux int rieures, R gion du Qu bec. 42 p.
- 1621 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1986. Aspects qualitatif du d veloppement au Bassin du Lac Laflamme d'un mod le pr dictif de l'impact des pr cipitations acides - phase de la fonte printani re de 1985. Environnement Canada, Direction des eaux int rieures, R gion du Qu bec. 142 p.

(section 3. 2)

- 1588 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, J. ROBERGE, A.P. PLAMONDON, 1986. Snowmelt in a boreal forest site: an integrated model of meltwater quality (SNOQUAL1). Water, Air, and Soil Pollution. 31: p. 431 - 439.
- 1582 JONES, H.G., W. SOCHANSKA, J.M. GAUTHIER, J.-Y. CHARETTE, 1984. The physical and chemical evolution of snowpack structure, meltwater flow patterns and surface runoff during the springmelt period in a northern boreal forest. Canadian Hydrology Symposium, University Laval, Sainte-Foy, Quebec. June 10-12, 1984. 28 p.
- 973 JONES, M., D. MARMOREK, M. STALEY, 1982. Acidic precipitation in eastern Canada: an application of adaptive management to the problem of assessing and predicting impacts on an extensive basis. Department of Fisheries and Oceans, Great lakes Biolimnology Laboratory, Sault Ste-Marie and Burlington, Ontario. 145 p.
- 970 JORANGER, E., ET AL., 1980. Air and rainfall chemistry in Finnmark Norway 1976-1979 natural base water chemistry and relationship to fishing in the Jergul Norway, field research territory 1977. SNSF-project, IR 76/80. Norway. 161 p.
- 364 JOURNAULT-DUPONT C., 1979. Etude écologique de la région de Rouyn - Noranda. Conférence sur les contaminants dans l'environnement, Québec, 14-15 mai. 43 p.
- 1483 KAGAN, J., E.D. KAGAN, A.K. ISABELLE, P.A. KAGAN, S. QUIGLEY, 1985. The phytotoxicity of non-carcinogenic polycyclic aromatic hydrocarbons in aquatic organisms. Chemosphere 14(11-12): p. 1829 - 1834.
- 1128 KAHL, J.S., S.A. NORTON, 1983. Metal input and mobilization in two acid-stressed lake watersheds in Maine. Land and Water Resources Center, University of Maine at Orono. PB8320825 6. 70 p.
- 1392 KAMARI, J., 1985. Quantitative assessment of lake acidification in Finland. Aqua Fenn. 15(1): p. 11 - 20.
- 107 KAPLAN, E., H.C. THODE JR., A. PROTAS, 1981. Rocks, Soils, and Water Quality. Relationships and Implications for Effects of Acid Precipitation on Surface Water in the Northeastern United States. Environ. Sci. Technol. 15(5): p. 539 - 544.

(section 3. 2)

- 1342 KATZ, B.G., O.P. BRICKER, M.M. KENNEDY, 1985. Geochemical mass-balance relationships for selected ions in precipitation and stream water, Catoctin mountains, Maryland. Am. J. Sci. 285(10): p. 931 - 962.
- 1082 KELLER, W., 1983. Spring pH and alkalinity depressions in lake superior tributaries. J. Great Lakes Res. 9(3): p. 425 - 429.
- 1321 KELLY, C.A., J.W.M. RUDD, A. FURUTANI, D.W. SCHINDLER, 1984. Effects of lake acidification on rates of organic matter decomposition in sediments. Limnology and Oceanography 29(4): p. 687 - 694.
- 921 KELLY, C.A., J.W.M. RUDD, R.B. COOK, D.W. SCHINDLER, 1982. The potential importance of bacterial processes in regulating rate of lake acidification. Limnology and Oceanography 27(5): p. 868 - 882.
- 450 KENNEDY, L.A., 1980. Teratogenesis in Lake Trout (Salvelinus namaycush) in an Experimentally Acidified Lake. Can. J. Fish. Aquat. Sci., 37: p. 2355 - 2358.
- 415 KEREKES, J., 1973. Aquatic Resources Inventory Kejimikujik National Park. Part 5. Chemical Composition of Lake and River Waters. Report for Parks Canada by Canadian Wildlife Service, Eastern Region. 66 p.
- 271 KEREKES, J.J., 1980. Preliminary Characterization of three Lake Basins Receiving Acid Precipitation in Nova Scotia. Environment Canada, Canadian Wildlife Service, Halifax. 11 p.
- 532 KEREKES, J. G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1981. The Response of three Lake Basins to Acid Precipitation in Central Nova Scotia between June, 1979, and May, 1980. Environment Canada, Canadian Wildlife Service, Halifax, N.S. 14 p.
- 1117 KEREKES, J., G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1982. Characterization of three lake basins sensitive to acid precipitation in central Nova Scotia (June 1979 to May 1980). Int. Revue ges. Hydrobiol. 67(5): p. 679 - 694.
- 1609 KEREKES, J., G. HOWELL, T. POLLOCK, 1983. Problems associated with sulphate determination in colored, humic waters in Kejimikujik National Park, Nova Scotia (Canada). Verh. Internat. Verein. Limnol. 12. (In press). 16 p.

(section 3. 2)

- 1608 KEREKES, J., T. POLLOCK, 1983. Comment on the interpretation of the sulphate ions in Watt et al., 1983, Evidence of acidification on some Nova Scotia rivers and its impact on Atlantic salmon, Salmo salar. Can. J. Fish. Aquat. Sci. 40:462 - 473. Can. J. Fish. Aquat. Sci. 40(12). 5 p.
- 991 KILHAM, P., 1982. Acid precipitation: Its role in the alkalization of a lake in Michigan. Limnology and Oceanography 27(5): p. 856 - 867.
- 1250 KLING, G.W., M.C. GRANT, 1984. Acid precipitation in the Colorado front range: an overview with time predictions for significant effects. Arctic and Alpine Research 16(3): p. 321 - 329.
- 688 KRAMER, J., A. TESSIER, 1982. Acidification of aquatic systems: a critique of chemical approaches. Dept. of Geology, Mc Master University, Ont. 30 p.
- 1132 KRAMER, J.R., 1984. Analysis and comparison of past and present aquatic acidification data. McMaster University, Department of Geology, Hamilton, Ont. No. 1984/1, 16 p.
- 1265 KRAUSE-DELLIN, D., C. STEINBERG, 1984. Evidence of lake acidification by a novel biological pH-meter. Environmental Technology Letters 5(9): p. 403 - 406.
- 1068 KRUG, E.C., C.R. FRINK, 1983. Acid rain on acid soil: A new perspective. Science 221(4610): p. 520 - 525.
- 202 KWIATKOWSKI, R.E., J.C. ROFF, 1976. Effects of Acidity on the Phytoplankton and Primary Productivity of Selected Northern Ontario Lakes. Canadian Journal of Botany 54: p. 2546 - 2561.
- 1601 LAM, D.C.L., A.G. BOBBA, 1985. Modelling watershed runoffs and basin acidification. National Water Research Institute, Burlington, Ontario. 12 p.
- 1311 LANGLOIS, C., A. LEMAY, J. OUZILLEAU, Y. VIGNEAULT, 1985. Qualité physico-chimique de 251 lacs du bouclier canadien (Québec). Rapp. manus. can. sci. halieut. aquat. 1792: 63 p.

(section 3. 2)

- 967 LANGLOIS, C., Y. VIGNEAULT, L. DESILETS, A. NADEAU, M. LACHANCE, 1983. Evaluation des effets de l'acidification sur la physico-chimie et la biologie des lacs du bouclier canadien (Québec). Rapp. techn. can. sci. halieut. aquat. 1233: 129 p.
- 1328 LAZERTE, B.D., P.J. DILLON, 1984. Relative importance of anthropogenic versus natural sources of acidity in lakes and streams of central Ontario. Can. J. Fish. Aquat. Sci. 41: p. 1664 - 1677.
- 1312 LE JEUNE, R., B.P. HARVEY, Y. VIGNEAULT, 1984. Prospection sommaire de quelques habitats d'omble chevalier *Salvelinus alpinus* (Linné) du Québec méridional. Rapp. manus. can. sci. halieut. aquat. 1804: 47 p.
- 1267 LECLERC, J., Y.C. CHAGNON, C. LANGLOIS, P. DULUDE, 1984. Influence de l'acidification sur la survie et le développement des oeufs et des alevins vésiculés d'omble de fontaine (*Salvelinus fontinalis* (Mitchill) dans la région de Charlevoix (Québec). Rapp. tech. can. sci. halieut. aquat. 1343: 56 p.
- 1487 LEFOHN, A.S., G.O. KLOCK, 1985. The possible importance of forest soil processes in defining surface water pH depressions. J. Air Pollut. Control Assoc. 35(6): p. 632 - 637.
- 771 LEIVESTAD, H., 1982. Effects from acid rain on fish. In: Air Pollution by Nitrogen Oxides. Schneider, T. et L. Grant (Eds), Amsterdam. Elsevier Scientific Publishing, p. 567 - 576.
- 213 LEIVESTAD, H., I.P. MUNIZ, 1976. Fish Kill at Low pH in a Norwegian River. Nature 259: p. 391 - 392.
- 531 LEWIS, W.M. JR. 1982. Changes in pH and buffering capacity of lakes in the Colorado Rockies. Limnol. Oceanogr., 27(1): p. 167 - 172.
- 58 LEWIS, W.M., C. PETERS, 1956. Coal Mine Slag Drainage (Toxicity to representative fishes). Industrial Wastes. March-April. p. 145 - 147.
- 1489 LIKENS, G.E., 1985. An experimental approach for the study of ecosystems, the 5th Tansley lecture. J. Ecol. 73(2): p. 381 - 396.

(section 3. 2)

- 1089 LIKENS, G.E., F.H. BORMANN, J.S. EATON, 1980. Variations in precipitation and streamwater chemistry at the Hubbard Brook Experimental Forest during 1964 to 1977. In: Effects of acid precipitation of Terrestrial ecosystems, T.C. Hutchinson and M. Havas (eds). p. 443 - 464.
- 1289 LIKENS, G.E., F.H. BORMANN, R.S. PIERCE, J.S. EATON, R.E. MUNN, 1984. Long-term trends in precipitation chemistry at Hubbard Brook, New Hampshire. Atmospheric Environment 18(12): p. 2641 - 2647.
- 1491 LINDSTROM, T., W. DICKSON, G. ANDERSSON, 1984. Reclaiming acid high mountain lakes by liming; a progress report. Inst. Freshwater Res. Drottningholm Rep. 61: p. 128 - 137.
- 417 LOCKHART, W.L., A. LUTZ, 1975. Preliminary Biochemical observations of fishes inhabiting an acidified lake in Ontario, Canada. Proc. of the First International Symp. on Acid Precipitation and the Forest Ecosystem. Dochinger, L.S., T.A. Seliga, eds.; U.S. Department of Agriculture, Forest Service Gen. Tech. Report, NE-23 1976. p. 545 - 569.
- 897 LOGAN, R.M., J.C. DERBY, L.C. DUNCAN, 1982. Acid precipitation and lake susceptibility in the central Washington Cascades. Environ. Sci. Technol. 16(11): p. 771 - 775.
- 1494 MACHELL, J.R., J.F. WILTSHIRE, D. WALTER, R. DONALD, 1985. A study of acidification in seven lakes in Mainland, Nova Scotia, 1979-1981. Canada, Environment Canada, Environment Protection Service, EPS-5-AR-85-1. 107 p.
- 908 MAGNAN, P., 1982. Variation mensuelle de la physico-chimie de 22 lacs du parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 39 p.
- 725 MAGNAN, P., 1982. Etude de la sensibilité aux précipitations acides de 22 lacs du Parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 44 p.

(section 3. 2)

- 1562 MARMOREK, D.R., G. CUNNINGHAM, M.L. JONES, P. BUNNELL, 1984. Smowmelt effects related to acidic precipitation: a structured review of existing knowledge and current research activities. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 117 p.
- 1561 MARMOREK, D.R., K.W. THORNTON, J.P. BAKER, D.P. BERNARD, M.L. JONES, B.S. REUBER, 1986. Acidic episodes in surface waters: the state of science. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 243 p.
- 538 McLEAN, R.A.N., 1981. The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem. Implications for Control Strategies. Environmental Sciences Group, Domtar Research Centre, Senneville. 10 p.
- 495 McMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.
- 1406 MEINEL, V., U. MATTHIAS, S. ZIMMERMANN, 1985. Ecophysiological studies on acid tolerance of Gammarus-fossarum. Arch. Hydrobiol. 104(2): p. 287 - 302.
- 1125 MELACK, J.M., ET AL. 1983. Assessment of acidity of lakes and precipitation in the Sierra Nevada. Marine Science Institute, University of California. Technical Completion Report to U.S. Department of the Interior. PB83-25552 1. 36 p.
- 1344 MELACK, J.M., J.L. STODDARD, C.A. OCHS, 1985. Major ion chemistry and sensitivity to acid precipitation of Sierra Nevada lakes. Water Resources Res. 21(1): p. 27-32.
- 1100 MERANGER, J.C., T.R. KHAN, C. VAIRO, R. JACKSON, WAN CHI LI, 1983. Lake water acidity and the quality of pumped cottage water in selected areas of Northern Ontario. Intern. J. Environ. Anal. Chem. 15(3): p. 185 - 212.
- 433 MICHALSKI, M.F.P., J. ADAMSKI, 1974. Restoration of Acidified Lakes, Middle and Lohi in the Sudbury Area. In: Ontario Industrial Wastes Conferences: p. 163 - 175.

(section 3. 2)

- 263 MILBRINK, G., N. JOHANSSON, 1975. Some Effects of Acidification on Roe of Roach, (*Rutilus rutilus* L.), and Perch, (*Perca fluviatilis* L.) With Special Reference to the Avaa Lake System in Eastern Sweden. Fish. Board, Swed. Inst. Freshwater Res. Drottingholm, Rep. 54: p. 52 - 62.
- 334 MINNS, C.K., 1981. Acid Rain: A preliminary Estimate of the Risk to Ontario's Inland Fisheries. Can. MS Rep. Fish. Aquat. Sci. 1622: 36 p.
- 1122 MITCHELL, M.J., 1982. Effect of atmospheric sulfur pollutants derived from acid precipitation on the benthic dynamics of lakes. State University of New York, Syracuse, N.Y. Final Report to Bureau of Reclamation, U.S. Department of the Interior, Washington. PB83-208322. 24 p.
- 1060 MOREAU, G., C. BARBEAU, J.J. FRENETTE, J. SAINT-ONGE, M. SIMONEAU, 1983. Zinc, manganese and strontium in opercula and scales of brook trout (*Salvelinus fontinalis*) as indicators of lake acidification. Can. J. Fish. Aquat. Sci. 40(10): p. 1685 - 1691.
- 1282 MORGAN, M.D., 1984. Acidification of headwater streams in the New Jersey Pinelands: A re-evaluation. Limnology and Oceanography 29(6): p. 1259 - 1266.
- 138 MORLING, G., 1981. Effects of acidification on some lakes in Western Sweden. Vatten 37(1): p. 25 - 38.
- 847 MOSELLO, R., 1981. Chemical characteristics of fifty italian alpine lakes (Pennine-Lepontine Alps), with emphasis on the acidification problem. Memorie del l'Istituto Italiano di Idrobiologia "Dott. Marco De Marchi" 39: p. 99 - 118.
- 841 MOSELLO, R., G. TARTARI, 1983. Effets des précipitations acides sur les lacs subalpins et alpins. Bulletin de la Qualité des Eaux VIII(2): p. 96 - 100.
- 258 MOUNT, D.I., 1973. Chronic Effect of Low pH on Fathead Minnow Survival, Growth and Reproduction. Water Research 7: p. 987 - 993.

(section 3. 2)

- 918 MUNIZ, I.P., H.M. SEIP, 1982. Possible effects of reduced norwegian sulphur emissions on the fish populations in lakes in southern Norway. Norwegian Ministry of Environment, Central Institute for Industrial Ressources. Report no. 81 03 13-2. 28 p.
- 1012 NADEAU, A., C. DESJARDINS, Y. VIGNEAULT, 1984. Teneurs en métaux et ions majeurs des chairs de poisson de trente-deux lacs du Québec. Rapport manuscrit canadien des sciences halieutiques et aquatiques no 1746. Pêches et Océans Canada, Québec. 79 p.
- 1345 NALEWAJKO, C., B. PAUL, 1985. Effects of manipulations of aluminum concentrations and pH on phosphate uptake and photosynthesis of planktonic communities in two precambrian shield lakes. Can. J. Fish. Aquat. Sci. 42(12): p. 1946 - 1953.
- 1072 NERO, R.W., D.W. SCHINDLER, 1983. Decline of Mysis relicta during the acidification of lake 223. Can. J. Fish. Aquat. Sci. 40(11): p. 1905 - 1911.
- 42 NICHOLS, Jr. L.E., F.J. Bulow, 1973. Effects of Acid Mine Drainage on the Stream Ecosystem of the East Fork of the Obey River, Tennessee. Journal of the Tennessee Academy of Science. 48(1): p. 30 - 39.
- 875 NILSSEN, J.P., 1982. Acidification in southern Norway: Seasonal variation of aluminium in lake waters. Hydrobiologia, 94(3): p. 217 - 221.
- 874 NILSSEN, J.P., 1982. La détection de l'acidification régionale des lacs et de ses causes. Eau du Québec 15(4): p. 335-336, 338, 340 - 341.
- 1506 NILSSEN, J.P., 1984. An ecological jig-saw puzzle reconstructing aquatic biogeography and pH in an acidified region. Inst. Freshwater Res. Drottningholm Rep. 61: p. 138 - 147.
- 1161 NORTON, D., R. DAVIS, F. BRAKKE, 1982. Responses of Northern New-England lakes to atmospheric inputs of acids and heavy metals. Orono, Maine: Land and Water resources Center, University of Maine at Orono, 2 microfiches.
- 1148 NORTON, S.A., A. HENRIKSEN, 1983. The importance of CO2 in evaluation of effects of acidic deposition. Vatten 39(4): p. 346 - 354.

(section 3. 2)

- 1346 NORTON, S.A., J.S. KAHL, R.F. WRIGHT, R.B. DAVIS, 1985. Sediment and lakewater chemistry; interdependencies. Abstr. Pap. Am. Chem. Soc. 190.
- 1579 NORWEGIAN INSTITUTE FOR WATER RESEARCH, 1985. Rain project. Norwegian Institute for Water Research, Oslo, Norway. 4 p.
- 775 NRIAGU, J.O., H.K.T. WONG, R.D. COKER, 1982. Deposition and chemistry of pollutant metals in lakes around the smelters at Sudbury, Ontario. Environmental Science and Technology, 16(9): p. 551 - 560.
- 1225 NRIAGU, J.O., J.F. GAILLARD, 1984. The speciation of pollutant metals in lakes near the smelters at Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J. Nriagu (ed.). p. 349 - 374.
- 423 ODEN, S., T. AHL, 1973. The Acidification of Scandinavian Waters. Fisheries Research Board of Canada, Translation Series no 2535: 32 p.
- 690 OGDEN, J.G. III, 1982. Seasonal mass balance of major ions in three small watersheds in a maritime environment. Water, Air, and Soil Pollution 17(2): p. 119 - 130.
- 475 OGDEN, J.G., 1980. Water Chemistry Changes in Halifax County, Nova Scotia Lakes. Department of Biology, Dalhousie University. Draft: 32 p.
- 1079 OHMAN, L.-O., S. SJOBERG, 1983. Equilibrium and structural studies of silicon (IV) and aluminium (III) in aqueous solution - 10. A potentiometric study of aluminium (III) pyro-catecholates and aluminium (III) hydroxo-pyrocatecholates in 0.6 M Na (Cl). Polyhedron 2(12): p. 1329 - 1335.
- 840 OKITA, T., 1983. Précipitations acides et phénomènes connexes au Japon. Bulletin de la Qualité des Eaux VIII(2): p. 101 - 108.
- 667 OKLAND, J., 1980. Acidification in 50 Norwegian lakes. Nordic Hydrology 11: p. 25 - 32.
- 1232 OKLAND, K.A. J.G.J. KUIPER, 1982. Distribution of small mussels (Sphaeriidae) in Norway, with notes on their ecology. Malacologia 22(1-2): p. 469 - 477.

(section 3. 2)

- 1056 OUELLET, M., H.G. JONES, 1983. Historical changes in acid precipitation and heavy metals deposition originating from fossil fuel combustion in eastern north America as revealed by lake sediment geochemistry. Wat. Sci. Tech. 15(12): p. 115 - 130.
- 212 OVERREIN, L.N., 1972. Sulphur Pollution Patterns Observed; Leaching of Calcium in Forest Soil Determined. Ambio 1: p. 145 - 147.
- 1513 PAERL, H.W., 1985. Enhancement of marine primary production by nitrogen-enriched acid rain. Nature (London) 315(6022): p. 747 - 749.
- 474 PANKO, A.W., 1980. Mercury uptake by Fish in Acidified Lake Ecosystems. In: Environmental Geochemistry Report, McMaster University. 43 p.
- 512 PARSONS, J.D., 1976. Effects of Acid-Mine Wastes on Aquatic Ecosystems. Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 571 - 595.
- 866 PATILA, A., 1982. Changes in water chemistry due to acidification - Study of 23 lakes in southern Finland. Luonnon Tutkija 86(1): p. 19 - 22. (En finnois avec résumé en anglais).
- 870 PATILA, A., 1982. Factors influencing the acidification of lakes. Luonnon Tutkija, 86(1): p. 3 - 6. (En finnois avec résumé en anglais).
- 865 PATRICK, R., V.P. BINETTI, S.G. HALTERMAN, 1981. Acid lakes from natural and anthropogenic causes. Science 211: p. 446 - 448.
- 754 PETERS, N.E., R.A. SCHROEDER, D.E. TROUTMAN, 1982. Temporal Trends in the Acidity of Precipitation and Surface Waters of New York. United States Geological Survey Water-Supply Paper 2188. 35 p.
- 1271 PETERSON, R.H., D.J. MARTIN-ROBICHAUD, 1984. Water chemistry of ten lakes in southern New Brunswick: 1983 survey. Can. Tech. Rep. Fish. Aquat. Sci. 1299: 23 p.

(section 3. 2)

- 712 PFEIFFER, M.H., P.J. FESTA, 1980. Acidity status of lakes in the Adirondack region of New-York in relation to fish resources. New York State Department of Environmental Conservation. 36 p.
- 737 PITBLADO, J.R., W. KELLER, N.I. CONROY, 1980. A classification and description of some northeastern Ontario Canada lakes influenced by acid precipitation. J. Great Lakes Res. 6(3): p. 247 - 257.
- 1408 PLANKEY, B.J., H.H. PATTERSON, C.S. CRONAN, 1986. Kinetics of aluminum fluoride complexation in acidic waters. Environ. Sci. Technol. 20(2): p. 160 - 165.
- 1639 POPE, G., M.-C. TARISSANTS, J.-J. FRENETTE, G. VERREAULT, J.-L. DESGRANGES, 1989. Effets des facteurs biotiques et abiotiques sur la structure et les relations trophiques des communautés planctoniques et benthiques: revue des hypothèses. Rapp. techn. can. sci. halieut. aquat. 1687: 70 p.
- 910 POTVIN, P., Y. GRIMARD, 1983. Etude de la qualité du milieu aquatique de 67 lacs à sauvagine de la région de Shefferville, Québec. Ministère de l'Environnement du Québec, Service de la qualité des eaux, PA-8. 134 p.
- 555 POWELL, J.J., 1976. Preliminary report on the effects of neutralization on the fish community of Nelson lake, near Sudbury, Ontario. Ministry of Natural Resources, Fish and Wildlife Branch, Sudbury, Ontario. 38 p.
- 751 RADDUM, G.G., O.A. SAETHER, 1981. Chironomid communities in Norwegian lakes with different degrees of acidification. Verh. Internat. Verein. Limnol. 21(1): p. 399 - 405.
- 1347 RAMLAL, P.S., J.W.M. RUDD, A. FURUTANI, L. XUN, 1985. The effect of pH on methyl mercury production and decomposition in lake sediments. Can. J. Fish. Aquat. Sci. 42(4): p. 685 - 692.
- 1015 RAO, S.S., B.J. DUTKA, 1983. Influence of acid precipitation on bacterial populations in lakes. Hydrobiologia 98: p. 153 - 157.
- 1293 RASK, M., 1984. The effect of low pH on perch, Perca fluviatilis L. II. The effect of acid stress on different development stages of perch. Ann. Zool. Fennici 21(1): p. 9 - 13.

(section 3. 2)

- 1294 RASK, M., 1984. The effect of low pH on perch, *Perca fluviatilis* L. III. The perch population in a small, acidic, extremely humic forest lake. Ann. Zool. Fennici 21(1): p. 15 - 22.
- 1101 REED, J.S., J.C. HENNINGSON, 1984. Acid precipitation and drinking water supplies. J. Am. Water Works Assoc. 76(3): p. 60 - 65.
- 699 RICHARD, Y., 1982. Relations entre le niveau d'acidité de 158 lacs du parc des Laurentides et l'évolution de leurs statistiques de pêche au cours des neuf dernières années. Ministère de l'Environnement du Québec, Direction générale des inventaires et de la recherche, service de la qualité des eaux, PA-5. 115 p.
- 979 RICHARD, Y., 1982. Relationships between the acidity level of 158 lakes in the Parc des Laurentides and the evolution of their fishing statistics over the last nine years. Ministère de l'Environnement du Québec, Direction de la recherche, Service de la qualité des eaux, PA-5A. 115 p.
- 1528 RIGGAN, P.J., R.N. LOCKWOOD, E.N. LOPEZ, 1985. Deposition and processing of airborne nitrogen pollutants in mediterranean-type ecosystems of southern California, USA. Environ. Sci. Technol. 19(9): p. 781 - 789.
- 917 ROBINSON, J.W., H. GHANE, 1983. Continued studies of acid rain and its effects on the Baton Rouge area. Journal of Environmental Science and Health 18(2): p. 165 - 174.
- 1636 RODRIGUE, J., J.-L. DESGRANGES, 1988. Etude de la qualité du milieu aquatique et des composantes biologiques de 81 lacs à sauvagine du Québec méridional. Ministère de l'Environnement du Québec, Direction des relevés aquatiques. Rapport ENVIRODOQ 860061. 178 p.
- 691 ROSENQVIST, I.T., 1978. Acid precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment 10(3): p. 271 - 272.
- 1568 ROSENQVIST, I.T., P. JORGENSEN, H. RUESLATTEN, 1980. The importance of natural H<sup>+</sup> production for acidity in soil and water. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan (ed.). Sandefjord, Norway, March 11-14, 1980. p. 240 - 241.

(section 3. 2)

- 265 RUNN, P., N. JOHANSSON, G. MILBRINK, 1977. Some Effects of low pH on the Hatchability of Eggs of Perch (Perca Fluviatilis L.). Zoon 5(2): p. 115 - 125.
- 46 RYAN, P.M., H.H. HARVEY, 1977. Growth of Rock Bass, Ambloplites rupestris, in Relation to the Morphoedaphic Index as an Indicator of an Environmental Stress. J. Fish. Res. Board Can. 34: p. 2079 - 2088.
- 56 RYAN, P.M., H.H. HARVEY, 1980. Growth responses of yellow perch, Perca flavescens (Mitchill), to lake acidification in the La Cloche Mountain Lakes of Ontario. Env. Biol. Fish. 5(2): p. 97 - 108.
- 589 RYAN, P.M., H.H. HARVEY. 1981. Factors accounting for variation in the growth of rock bass (Ambloplites rupestris) and yellow perch (Perca flavescens) in the acidifying La Cloche Mountain Lakes of Ontario, Canada. Verh. Internat. Verein. Limnol., 21: p. 1231 - 1237.
- 1192 SADLER, K., 1983. A model relating the results of low pH bioassay experiments to the fishery status of Norwegian lakes. Freshwater Biology 13(5): p. 453 - 463.
- 315 SCHEIDER, W., J. ADAMSKI, M. PAYLOR, 1975. Reclamation of Acidified Lakes near Sudbury, Ontario. Ontario Ministry of the Environment: 129 p.
- 422 SCHEIDER, W., P.J. DILLON, 1976. Neutralization and fertilization of Acidified lakes near Sudbury, Ontario. Proc. 11th Canadian Symp. Water Poll. Research Canada, 11: p. 93 - 100.
- 168 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1979. Effects of Acidic Precipitation on Precambrian Freshwaters in Southern Ontario. Journal of great Lakes Research 5 (1): p. 45 - 51.
- 548 SCHEIDER, W.A., J. JONES, B. CAVE, 1976. A Preliminary Report on the Neutralization of Nelson Lake near Sudbury, Ontario, 1976. Ontario Ministry of the Environment, Limnology and Toxicity Section, Water Resources Branch. 36 p.
- 1533 SCHINDLER, D.W., K.H. MILLS, D.F. MALLEY, D.L. FINDLAY, J.A. SHEARER, I.J. DAVIES, M.A. TURNER, G.A. LINSEY, D.R. CRUIKSHANK, 1985. Long-term ecosystem stress; the effects of years of experimental acidification on a small lake. Science (Wash. D.C.) 228(4706): p. 1395 - 1401.

(section 3. 2)

- 1389 SCHINDLER, D.W., M.A. TURNER, R.H. HESSLEIN, 1985. Acidification and alkalization of lakes by experimental addition of nitrogen compounds. Biogeochemistry 1(2): p. 117 - 133.
- 278 SCHINDLER, D.W., R.W. NEWBURY, K.G. BEATY, P. CAMPBELL, 1976. Natural Water and Chemical Budgets for a Small Precambrian Lake Basin in Central Canada. J. Fish. Res. Board Can. 33: p. 2526 - 2543.
- 892 SCHINDLER, D.W., T.R. RUSZCZYNSKI, 1983. A test of limnological data from the experimental lakes area, northwestern Ontario, for evidence of acidification. Can. Tech. Rep. Fish. Aquat. Sci. no. 1147. 17 p.
- 1534 SCHNOOR, J.L., W.D. PALMER, G.E. GLASS, 1985. Modelling impacts of acid precipitation for northeastern Minnesota. EPA (Enviro. Prot. Agency), Rep no. EPA/600/D-85/035, order no. PB85-170181/GAR. 42 p.
- 108 SCHOFIELD, C.L., 1977. Acid snow-Melt Effects on Water Quality and Fish Survival in Adirondack Mountains of New-York State. U.S. National Technical Information Service. Completion Report, PB-277-801. 27 p.
- 1604 SCHOFIELD, C.L., 1979. Processes limiting fish populations in acidified lakes. In: Atmospheric sulfur deposition - Environmental impact and health effects. Proceedings of the second life science symposium, Gatlinburg, Tennessee; October 14-18, 1979. Ann Arbor Science Publisher. 568 p.
- 1379 SCHOFIELD, C.L., J.N. GALLOWAY, G.R. HENDRY, 1985. Surface water chemistry in the ILWAS study basins. Water, Air, and Soil Pollution 26(4): p. 403 - 424.
- 372 SCHOFIELD, C.L., J.R. TROJNAR, 1980. Aluminum Toxicity to Brook Trout (Salvelinus fontinalis) in Acidified Waters. In: Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23, 1979. p. 341 - 366.
- 571 SCHOFIELD, Jr., L.L., 1965. Water Quality in Relation to Survival of Brook Trout (Salvelinus fontinalis (Mitchill)). Transaction of the American Fisheries Society 94: p. 227 - 235.

(section 3. 2)

- 1129 SCRUTON, D.A., 1983. A survey of headwater lakes in insular Newfoundland, with special reference to acid precipitation. Can. Tech. Rep. Fish. Aquat. Sci. 1195: 110 p.
- 444 SEIP, H.M., A. TOLLAN, 1978. Acid Precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment 10: p. 253 - 270.
- 290 SEIP, H.M., E.T. GJESSING, H. KAMBEN, 1979. Importance of the composition of the precipitation for the pH in runoff-experiments with artificial precipitation on partly soil-covered "mini-catchments". SNSF - Project. Rapport IR 47/76, Oslo. 34 p.
- 289 SEIP, H.M., G. ABRAHAMSEN, E.T. GJESSING, A. STUANES, 1979. Studies of soil, precipitation and run-off chemistry in six small natural plots ("mini-catchments"). SNSF-Project Rapport IR 46/76, Oslo. 62 p.
- 705 SEIP, H.M., G. ABRAHAMSEN, N. CHRISTOPHERSEN, E.T. GJESSING, A.O. STUANES, 1980. Snow and meltwater chemistry in minicatchments. SNSF-Project, report IR 53/80, Oslo. 51 p.
- 1149 SEIP, H.M., S. RUSTAD, 1984. Variations in surface water pH with changes in sulphur deposition. Water, Air, and Soil Pollution 21(1-4): p. 217 - 223.
- 291 SEMB, A., 1978. Deposition of trace elements from the atmosphere in Norway. SNSF - Project, Rapport FR-13/78, Oslo: 28 p.
- 868 SEVOLA, P., R. HUDD, M. HILDEN, 1982. Acidification of watercourses in sulfide clay areas. Luonnon Tutkija, 86(1): p. 62 - 64. (En finnois avec résumé en anglais).
- 1249 SHARPE, W.E., D.R. DE WALLE, R.T. LEIBFRIED, ET AL., 1984. Causes of acidification of four streams on Laurel Hill in southwestern Pennsylvania. J. Environ. Qual. 13(4): p. 619 - 631.
- 1140 SHARPE, W.E., W.G. KIMMEL, E.S. YOUNG Jr., D.R. De WALLE, 1983. In-situ bioassays of fish mortality in two Pennsylvania streams acidified by atmospheric deposition. Northeastern Environmental Science 2(3-4): p. 171 - 178.

(section 3. 2)

- 782 SHILTS, W.W., L.E. FARRELL, 1982. Subbottom profiling of canadian shield lakes - implications for interpreting effects of acid rain. Geological Survey of Canada Paper, 82-IB: p. 209 - 221.
- 148 SKARTVEIT, A., 1981. Relationships between Precipitation Chemistry, Hydrology and Runoff Acidity. Nordic Hydrology 12(2): p. 65 - 80.
- 393 SKARTVEIT, A., Y.T. GJESSING, 1979. Chemical Budgets and Chemical Quality of Snow and Runoff During Spring Snowmelt. Nordic Hydrology, 10 (2-3): p. 141 - 154.
- 1169 SLOAN, R., C.L. SCHOFIELD, 1983. Mercury levels in brook trout (Salvelinus fontinalis) from selected acid and limed Adirondack lakes. Northeastern Environmental Science 2(3-4): p. 165 - 170.
- 1350 SMALL, M.J., M.C. SUTTON, 1986. A regional pH-alkalinity relationship. Water Res. 20(3): p. 335 - 344.
- 978 SMITH, R.A., R.B. ALEXANDER, 1983. Evidence for acid - precipitation - Induced trends in stream chemistry at hydrologic Bench - Mark stations. U.S. Geological Survey Circular 910, 12 p.
- 1064 SMOL, J.P., D.F. CHARLES, D.R. WHITEHEAD, 1984. Mallomonadacean microfossils provide evidence of recent lake acidification. Nature 307(5952): p. 628 - 630.
- 587 SOHTELL, M., P.RUNN. 1981. Sodium and potassium transport in brown trout yolk sac fry. Acta Physiol. Scand., 112(2): p. 24A.
- 871 SOIVIO, A., 1982. Physiological effects of lowered ambient pH on fish. Luonnon Tutkija, 86(1): p. 52 - 54. (En finnois avec résumé en anglais).
- 1541 SOVERI, J., 1985. Influence of meltwater on the amount and composition of groundwater in quaternary deposits in Finland. Vesientutkimuslaitoksen Julk. 63: 92 p.
- 235 SPRULES, W.G., 1975. Midsummer Crustacean Zooplankton Communities in Acid-Stressed Lakes. J. Fish. Res. Board Can. 32(3): p. 389 - 395.

(section 3. 2)

- 243 SPRULES, W.G., 1975. Factors affecting the structure of limnetic crustacean Zooplankton communities in central Ontario lakes. Verh. Internat. Verein. Limnol. 19: p. 635 - 643.
- 1349 SPRY, D.J., C.M. WOOD, 1985. Ion flux rates, acid-base status and blood gases in rainbow trout, *Salmo gairdneri*, exposed to toxic zinc in natural soft water. Can. J. Fish. Aquat. Sci. 42(8): p. 1332 - 1341.
- 630 SPRY, D.J., C.M. WOOD, P.V. HODSON, 1981. The effects of environmental acid on freshwater fish with particular reference to the softwater lakes in Ontario and the modifying effects of heavy metals. A literature review. Canadian Technical Report of Fisheries and Aquatic Sciences, no. 999. 144 p.
- 438 STASSEN, G.M., 1974. Aspects of Sudbury Environmental Degradation Problem as Relates to the Aquatic Communities. Report for the Ont. Ministry of Natural Resources: 70 p.
- 1519 STEINBERG, C., H. HARTMANN, 1986. A biological paleoindicator for early lake acidification: Mallomonadacean chrysophyceae scale abundance in sediments. Naturwissenschaften 73(1): p. 37 - 39.
- 1381 STOKES, P.M., R.C. BAILEY, G.R. GROULX, 1985. Effects of acidification on metal availability to aquatic biota, with special reference to filamentous algae. Environ. Health Perspect. 63: p. 79 - 88.
- 1277 STONER, J.H., A.S. GEE, K.R. WADE, 1984. The effects of acidification on the ecology of streams in the upper Tywi Catchment in West Wales. Environmental Pollution (Series A) 35(2): p. 125 - 157.
- 1351 STUART, S., R. MORRIS, 1985. The effects of season and exposure to reduced pH (abrupt and gradual) on some physiological parameters in brown trout (*Salmo-trutta*). Can. J. Zool. 63(5): p. 1078 - 1083.
- 1545 STUMM, W., K.J. IRGOLIC, A.E. MARTELL, 1985. Deposition of atmospheric and metal pollutants and their impact on freshwater environment; case studies in Switzerland. Environ. Inorg. Chem., (Pap. U.S.-Italy Jt. Sem. Workshop, 1983), p. 401 - 417.

(section 3. 2)

- 1546 SULLIVAN, M.A., S.C. SAMIS, J.A. SERVIZI, R.W. GORDON, 1985. A survey of selected British-Columbia and Yukon salmon Canada streams for sensitivity to acidification from precipitation. Can. Tech. Fish. Aquat. Sci. 1388: p. I - IX, 1 - 105.
- 157 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District, I. pH, Calcium and the Distribution of Invertebrates in the River Duddon. Freshwater Biology, 3: p. 437 - 462.
- 158 SUTCLIFFE, D.W., T.R. CARRICK, 1973. Studies on Mountain Streams in the English Lake District. III. Aspects of Water Chemistry in Brownrigg Well, Whelpside Ghyll. Freshwater Biology, 3: p. 561 - 568.
- 733 SUZUKI, K., 1982. Chemical changes of snow cover by melting. Jap. J. Limnol. 43(2): p. 102 - 112.
- 843 SVERDRUP, H., I. BJERLE, 1982. Dissolution of calcite and other related minerals in acidic aqueous solution in a pH-stat. Vatten 38(1): p. 59 - 73.
- 244 SWARTS, F.A., W.A. DUNSON, J.E. WRIGHT, 1978. Genetic and Environmental Factors Involved in Increased Resistance of Brook Trout to Sulfuric Acid Solutions and Mine Acid Polluted Waters. Transactions of the American Fisheries Society 107(5): p. 651 - 677.
- 94 SYLVESTRE, A., 1981. Interprétation des données physico-chimiques de 24 lacs du Sud du Québec étudiés dans le cadre du programme des précipitations acides du Service canadien de la faune. Environnement Canada, Service canadien de la faune, Région du Québec. 110 p.
- 1414 TAM, S.C., R.J.P. WILLIAMS, 1986. One problem of acid rain aluminum. J. Inorg. Biochem. 26(1): p. 35 - 44.
- 1548 TAYLOR, F., J.A. MATERA, T.C. CRUSBERG, R.D. CHEETHAM, A.H. HOFFMAN, 1985. Acid precipitation and drinking water quality in the eastern United States. Water Qual. Public Health, Proc. of a Conf., 1984. p. 11 - 17.
- 1322 TEASE, B., R.A. COLER, 1984. The effect of mineral acids and aluminium from coal leachate on substrate periphyton composition and productivity. Journal of Freshwater Ecology 2(5): p. 459 - 467.

(section 3. 2)

- 2 THOMPSON, M.E., 1979. Acidic Atmospheric Precipitation: Evaluation of its Impact on Some Canadian Surface Waters. National Water Research Institute: 14 p.
- 464 THOMPSON, M.E., 1981. The Cation Denudation Rate as a Quantitative Index of Vulnerability of Aquatic Systems to Acid Precipitation. National Water Research Institute, Burlington, Ontario, 12 p.
- 530 THOMPSON, M.E., 1981. The cation denudation rate as a quantitative index of sensitivity of eastern canadian rivers to acidic atmospheric precipitation. National Water Institute, Burlington, Ontario. 20 p.
- 607 THOMPSON, M.E., E.B. BENNETT, 1980. Variations in the Degree of Acidification of River Waters Observed in Atlantic Canada. National Water Research Institute, Burlington, Ontario. 11 p.
- 496 THOMPSON, M.E., F.C. ELDER, A.R. DAVIS, S. WHITLOW, 1980. Evidence of Acidification of Rivers of Eastern Canada. National Water Research Institute, Burlington, Ontario. 16 p.
- 1284 THOMPSON, M.E., M.B. HUTTON, 1984. Sulfate in lakes of eastern Canada: calculated yields compared with measured wet and dry deposition. Water, Air, and Soil Pollution 24: p. 77 - 83.
- 36 THOMPSON, M.E., M.B. HUTTON. 1981. Selected canadian lakes - cations, sulfate pH, PCO2 relationships. Burlington, National Water Research Institute, 31 p.
- 523 THOMPSON, M.E., M.B. HUTTON. 1982. Sulfate in lakes of eastern Canada: calculated atmospheric loads compared with measured wet deposition. National Water Research Institute, Burlington Ontario. 22 p.
- 570 TOMKIEWICZ, Jr., S.M., W.A. DUNSON, 1977. Aquatic Insect Diversity and Biomass in a Stream Marginally Polluted by Acid Strip Mine Drainage. Water Research 11: p. 397 - 402.
- 398 TROJNAR, J.R., 1977. Egg and Larval Survival of White Suckers (Catostomus commersoni) at Low pH. J. Fish. Res. Board Can. 34: p. 262 - 266.

(section 3. 2)

- 1618 TROUTMAN, D., N. PETERS, 1980. Comparison of lead, manganese, and zinc transport in three Adirondack lake watersheds, New York. In: Ecological impact of acid precipitation. Proceedings of an international conference, Sandefjord, Norway, March 11-14, 1980. D.Drablos and A. Tollan (eds.). SNSF project. p. 262 - 263.
- 736 TROUTMAN, D.E., N.E. PETERS, 1982. Deposition and transport of heavy metals in three lake basins affected by acid precipitation in the Adirondack mountains, New York. In: Energy and Environmental Chemistry. Acid Rain, Volume two. L.H. Keith (ed), Ann Arbor Science, Michigan. p. 33 - 89.
- 1549 TURNER, R.S., A.H. JOHNSON, D. WANG, 1985. Biogeochemistry of aluminum in McDonald Branch watershed, New-Jersey, USA, pine barrens. J. Environ. Qual. 14(3): p. 314 - 323.
- 716 UNDERWOOD, J.K., H.H. VAUGHAN, J.G. OGDEN III, C.G. MANN, 1982. Acidification of Nova Scotia lakes II: Ionic balances in dilute waters. Nova Scotia Department of the Environment, Halifax, 21 p.
- 811 VAN COILLIE, R., D. BROUARD, M. LACHANCE, Y. VIGNEAULT, 1982. Effets physico-chimiques des précipitations acides sur quatre rivières à saumons. Eau du Québec, 15(4): p. 384 - 393.
- 545 VAN DAM, H., G. SUURMOND, C.J.F. TERBRAAK, 1981. Impact of acidification on diatoms and chemistry of Dutch moorland pools. Hydrobiologia, 83(3): p. 425 - 459.
- 381 VAN LOON, J.C., R.J. BEAMISH, 1977. Heavy - Metal Contamination by Atmospheric Fallout of Several Flin Flon Area Lakes and the Relation to Fish Populations. J. Fish. Res. Board Can. 34(7): p. 899 - 906.
- 346 VANGENECHTEN, J.H.D., 1980. Interrelations between pH and other physico-chemical factors in surface waters of the Campine of Antwerp, (Belgium): with special reference to acid moorland pools. Arch. Hydrobiol. 90(3): p. 265 - 283.
- 753 VAUGHAN, H.H., J.K. UNDERWOOD, J.G. OGDEN, III, 1982. Acidification of Nova Scotia lakes. I: Response of diatom assemblages in the Halifax area. Water, Air, And Soil Pollution 18: p. 353 - 361.

(section 3. 2)

- 1575 VIDULICH, G.A., P.E. MULHARE, J.M. CLOONAN, T.C. CRUSBERG, R.D. CHEETHAM, A.H. HOFFMAN, 1984. Acid precipitation and its effect on several streams feeding the Worcester (Ma) reservoirs. Water Qual. Public Health, Proc. Conf. 1983. p. 69 - 83.
- 623 WALLSTEN, M., 1981. Changes of lakes in Uppland Central Sweden during 40 years. Acta Universitatis Upsaliensis Symbolae Botanicae Upsalienses 23(3): 83 p.
- 86 WATT, W.D., D. SCOTT, S. ROY, 1979. Acidification and Other Chemical Changes in Halifax County Lakes After 21 years. Limnology Oceanography 24 (6): p. 1154 - 1161.
- 783 WATT, W.D., C.D. SCOTT, W.J. WHITE, 1983. Evidence of acidification of some Nova Scotian rivers and its impact on Atlantic salmon "salmo salar". Canadian Journal of Fisheries and Aquatic Sciences, 40(4): p. 462 - 473.
- 1352 WEHR, J.D., L.M. BROWN, 1985. Selenium requirement of a bloom-forming planktonic alga from softwater and acidified lakes. Can. J. Fish. Aquat. Sci. 42(11): p. 1783 - 1788.
- 837 WENBLAD, A., 1982. Atmospheric fallout - a reason for increased transport of nitrogen in some rivers in southwest Sweden ?. Vatten 38(2): p. 149 - 155. (En suédois avec résumé en anglais).
- 1121 WESTERN AQUATICS INC., 1983. An assessment of the relationship among acidifying depositions, surface water acidification, and fish populations in North America. EPRI-EA-3127-Vol.1. Research project 1910-2. 169 p.
- 861 WHELPLEDALE, D.M., 1983. Dépôts acides: répartition et incidences. Bulletin de la Qualité des Eaux VIII(2): p. 73 - 80.
- 166 WHITBY, L.M., P.M. STOKES, T.C. HUTCHINSON, G. MYSLIK, 1976. Ecological Consequence of Acidic and Heavy-Metal Discharges from the Sudbury Smelters. Canadian Mineralogist 14: p. 47 - 57.
- 1416 WHITEHEAD, D.R., D.F. CHARLES, 1985. The recent acidification of Adirondack lakes, USA; paleoecological approaches. Abstr. Pap. Am. Chem. Soc. 190. 1 p.
- 394 WIEDERHOLM, T., L. ERIKSSON, 1977. Benthos of an Acid Lake. Oikos, 29: p. 261 - 267.

(section 3. 2)

- 1197 WILSON, E.E., L.A. BARRIE, 1981. Climatological study of acidic snowmelt shock potential for eastern Canada. Atmospheric Environment Service, Downsview, Ont. Proc. of the Eastern Snow conference, Syracuse, N.Y. June 4-5, 1981. p. 23 - 32.
- 629 WILTSHIRE, J.F., J.R. MACHELL, 1981. A study of acidification in sixteen lakes in Mainland Nova Scotia and Southern New-Brunswick; a preliminary report. Environment Canada, Environmental Protection Service, Atlantic Region, Surveillance Report EPS-5-AR-81-4. 102 p.
- 1384 WOOD, J.M., 1985. Effects of acidification on the mobility of metals and metalloids; an overview. Environ. Health Perspect. 63: p. 115 - 120.
- 1073 WREN, C.D. H.R. MacCRIMMON, 1983. Mercury levels in the sunfish *Lepomis gibbosus*, relative to pH and other environmental variables of Precambrian Shield lakes. Can. J. Fish. Aquat. Sci. 40(10): p. 1737 - 1744.
- 5 WRIGHT, R.F., E.T. GJESSING, 1976. Acid Precipitation: Changes in the Chemical Composition of Lakes. Ambio 5(5-6): p. 219 - 223.
- 1353 WRIGHT, R.F., 1985. Chemistry of lake Hovvatn, Norway, following liming and reacidification. Can. J. Fish. Aquat. Sci. 42(6): p. 1103 - 1113.
- 72 WRIGHT, R.F., A. HENRIKSEN, 1978. Chemistry of Small Norwegian Lakes, With Special Reference to Acid Precipitation. Limnology Oceanography 23(3): p. 487 - 498.
- 1074 WRIGHT, R.F., A. HENRIKSEN, 1983. Restoration of Norwegian lakes by reduction in sulphur deposition. Nature 305 (5933): p. 422 - 424.
- 304 WRIGHT, R.F., C. LYSHOLM, 1975. Regional survey of lakes in southern Norway, fall 1974. Preliminary analysis of waterchemistry data, SNSF Project, Rapport IR 6/75, Oslo: 24 p.
- 406 WRIGHT, R.F., E. SNEKVIK, 1978. Acid precipitation: Chemistry and fish populations in 100 lakes in southernmost Norway. International association of theoretical & applied limnology, 20: p. 765 - 775.

(section 3. 2)

- 1078 WRIGHT, R.F., O.K. SKOGHEIM, 1983. Aluminium speciation at the interface of an acid stream and a limed lake. Vatten 39(3): p. 301 - 304.
- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo. 467 p.
- 549 YAN, N.D., 1979. Phytoplankton Community of an Acidified, Heavy Metal-Contaminated Lake near Sudbury, Ontario: 1973-1977. Water, Air and Soil Pollution 11: p. 43 - 55.
- 784 YAN, N.D., 1983. Effects of changes in pH on transparency and thermal regimes of Lohi lake, near Sudbury, Ontario. Canadian Journal of Fisheries and Aquatic Sciences, 40(5): p. 621 - 626.
- 424 YAN, N.D., R.E. GIRARD, C.J. LAFRANCE, 1979. Survival of Rainbow Trout, Salmo Gairdneri, in submerged Enclosures in Lakes Treated with Neutralizing Agents near Sudbury, Ontario. Ontario Ministry of the Environment, 26 p.
- 1226 YAN, N.D., C. LAFRANCE, 1984. Responses of acidic and neutralized lakes near Sudbury, Ontario, to nutrient enrichment. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15), J. Nriagu (ed.). p. 457 - 521.
- 1224 YAN, N.D., G.E. MILLER, 1984. Effects of deposition of acids and metals on chemistry and biology of lakes near Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J. Nriagu (ed.). p. 243 - 282.
- 1390 YAN, N.D., G.E. MILLER, I. WILE, G.G. HITCHIN, 1985. Richness of aquatic macrophyte floras of soft water lakes of differing pH and trace metal content in Ontario, Canada. Aquat. Bot. 23(1): p. 27 - 40.
- 160 YAN, N.D., P.M. STOKES, 1976. The Effect of pH on Lake Water Chemistry and Phytoplankton in a La Cloche Mountain Lake. Water Pollution Research Canada 11: p. 127 - 137.
- 449 YAN, N.D., R. STRUS, 1980. Crustacean Zooplankton Communities of Acidic, Metal-Contaminated Lakes Near Sudbury, Ontario. Can. J. Fish. Aquat. Sci. 37: p. 2282 - 2293.

(section 3. 2)

- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.
- 703 ZIMMERMAN, A.P., H.H. HARVEY, 1979. Sensitivity to acidification of waters of Ontario and neighboring states. University of Toronto for Ontario Hydro. 136 p.

### 3. 3 Bassins jaugés

- 1213 AMBLER, D.C., 1983. Surface water hydrology Kejimikujik calibrated catchment program. (The aquatic and terrestrial effects of the long-range transport of air pollutants). Report IWD-AR-WRB-83-43. Environment Canada, Inland Waters Directorate, Atlantic Region, Dartmouth, Nova Scotia. 39 p.
- 336 AZZARIA, L.M., P.J. GELINAS, R. ROBITAILLE, J.F. WILHELMY, 1982. Etude géologique et hydrogéologique du lac Laflamme, Parc des Laurentides, Québec. Environnement Canada, Direction générale des eaux intérieures, 95 p.
- 259 BEAMISH, R.J., 1974. Loss of Fish Populations from Unexploited Remote Lakes in Ontario, Canada as a Consequence of Atmospheric Fallout of Acid. Water Research 8: p. 85 - 95.
- 1330 BEDARD, Y., 1984. Evolution de la qualité des eaux de fonte au Lac Laflamme (Québec), printemps 1984. INRS-EAU 52 p. (pour Environment Canada).
- 732 BERNIER, P., F. PADILLA, M. DESSUREAULT, P. GELINAS, L.M. AZZARIA, 1983. Etude hydrogéologique et hydrogéochimique du bassin versant du lac Laflamme campagne de 1982. Université Laval, Département de géologie et Environnement Canada, Direction générale des eaux intérieures, région du Québec, rapport préliminaire. 269 p.
- 1310 BERRYMAN, D., 1984. Caractéristiques statistiques des séries temporelles du Lac Laflamme et incidences sur l'opération du réseau TADPA de détection des tendances dans l'acidification des eaux de surface. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 48 p.
- 473 BOOTY, W., 1980. Watershed Acidification Model. In: Environmental Geochemistry Report, McMaster University: 35 p.
- 971 BOOTY, W.G., 1983. Watershed acidification model and the soil acid neutralization capacity concept. Ph. D. Thesis, McMaster University, Hamilton, Ont. 194 p.

(section 3. 3)

- 1565 BRAEKKE, F.H., 1980. Sulphate dynamics in natural environments; preliminary results from a case study. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 156 - 157.
- 1230 BROBERG, O., G. PERSSON, 1984. External budgets for phosphorus, nitrogen and dissolved organic carbon for the acidified lake Gardsjon. Arch. Hydrobiol. 99(2): p. 160 - 175.
- 728 CANADA. ENVIRONNEMENT CANADA, 1982. Le bassin jaugeé du lac Laflamme. Synthèse des travaux. Direction générale des eaux intérieures, région du Québec. 54 p.
- 552 CANADA. ENVIRONNEMENT CANADA. 1981. Le bassin jaugeé du lac Laflamme. Synthèse des travaux. Direction générale des eaux intérieures, Région du Québec: 8 p.
- 1021 CHARETTE, J.-Y., D. LAFLAMME, G. ROBITAILLE, 1983. Modification de la qualité des eaux de surface au lac Laflamme, forêt Montmorency, Québec, au cours de la fonte printanière de 1982. Environnement Canada, Direction générale des eaux intérieures, région du Québec (rapport préliminaire).
- 1570 CHEN, C.W., S.A. GHERINI, J.D. DEAN, R.J.M. HUDSON, R.A. GOLDSTEIN, 1984. Development and calibration of the integrated lake-watershed acidification study model. In: Modeling of total acid precipitation impacts. Acid precipitation series. John I. Teasley ed. Butterworth Publishers, Toronto. p. 175 - 203.
- 1614 CLAIR, T.A., 1986. Chemical and physical characteristics of snow in the Kejimikujik National Park area. Environment Canada, Inland Waters Directorate, Atlantic region, Moncton, N.B. Report no. IWD-AR-WQB-86-95. 56 p.
- 1356 CRONAN, C.S., 1985. Biogeochemical influence of vegetation and soils in the ILWAS watersheds. Water Air Soil Pollut. 26(4): p. 355 - 372.
- 988 DESCHENES, J., 1982. Notes sur l'hydrologie et l'hydrogéologie du bassin versant du lac Laflamme en relation avec l'application du modèle couplé. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 137 p.

(section 3. 3)

- 1613 DESCHENES, J., J.P. VILLENEUVE, 1985. Modeling the hydrologic cycle: The MC model. Nordic Hydrology 16: p. 273 - 290.
- 1013 DESCHESNES, J., J.P. VILLENEUVE, 1983. Etude au moyen du modèle couplé du système hydrologique du lac Laflamme. Rapport scientifique no 162, Université du Québec, INRS-Eau, Ste-Foy, 55 p.
- 1453 DETHIER, D.P., S.B. JONES, 1985. Atmospheric and weathering contributions to stream chemistry northwestern Massachusetts, USA. Northeast Environ. Sci. 4(1): p. 8 - 17.
- 634 DON, F.H., 1981. Operational plan for Turkey lakes forest watershed program 1981-82. National Water Research Institute, 23 p.
- 790 DRISCOLL, C.T. et G.E. LIKENS, 1982. Hydrogen ion budget of an aggrading forested ecosystem. Tellus, 34(3): p. 283 - 292.
- 1097 EATON, J.S., G.E. LIKENS, F.H. BORMANN, 1978. The input of gaseous and particulate sulfur to a forest ecosystem. Tellus 30: p. 546 - 551.
- 1088 EATON, J.S., G.E. LIKENS, F.H. BORMANN, 1980. Wet and dry deposition of sulfur at Hubbard Brook. In: Effects of acid precipitation of Terrestrial ecosystems, T.C. Hutchinson and M. Havas (eds). p. 69 - 75.
- 402 ELECTRIC POWER RESEARCH INSTITUTE, 1981. The Integrated Lake - Watershed Acidification Study (ILWAS). Contribution to the International Conference on the Ecological Impact of Acid Precipitation. EPRI-EA-1825, California. 87 p.
- 1120 ELZERMAN, A.W., 1983. Effects of acid deposition (rain) on a Piedmont aquatic ecosystem: Acid inputs, neutralization and pH changes. Clemson University, Final Technical Completion Report to Bureau of Reclamation U.S. Department of the Interior, Washington, Project no. B-141-SC. 79 p.
- 1338 ESHLEMAN, K.N., H.F. HEMOND, 1985. The role of organic acids in the acid-base status of surface waters at Bickford watershed, Massachusetts. Water Resources Research 21(10): p. 1503 - 1510.

(section 3. 3)

- 994 EVANS, R.D., 1983. Measurement of the export of trace metals from terrestrial catchments as a function of stream pH. A progress report to the Inland Waters Directorate. Trent University. 9 p.
- 928 FITZGERALD, J.W., T.C. STRICKLAND, W.T. SWANK, 1982. Metabolic fate of inorganic sulphate in soil samples from undisturbed and managed forest ecosystems. Soil Biol. Biochem 14(6): p. 529 - 536.
- 1400 FOSTER, N.W., 1985. Acid precipitation and soil solution chemistry within a maple-birch forest in Canada. For. Ecol. Manage. 12(3-4): p. 215 - 232.
- 949 GALLOWAY, J.N., C.L. SCHOFIELD, N.E. PETERS, G.R. HENDREY, E.R. ALTWICKER, 1983. Effect of atmospheric sulfur on the composition of three Adirondack lakes. Can. J. Fish. Aquat. Sci. 40(6): p. 799 - 806.
- 155 GJESSING, E.T., A. HENRIKSEN, M. JOHANNESSEN, R. WRIGHT, 1976. Effects of Acid Precipitation on Freshwater Chemistry. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(Ed). Research Report 6/76 p. 65 - 85.
- 1093 HAINES, B., 1983. Forest ecosystem SO<sub>4</sub> - S input - output discrepancies and acid rain: are they related ?. Oikos 41(1): p. 139 - 143.
- 196 HALL, R.J., G.E. LIKENS, 1981. Chemical flux in an acid-stressed stream. Nature 292(5821): p. 329 - 331.
- 544 HALL, R.J., G.E. LIKENS, S.B. FIANCE, G.R. HENDREY, 1980. Experimental Acidification of a stream in the Hubbard Brook experimental forest. New Hampshire Ecology 61(4): p. 976 - 989.
- 1610 HENDERSHOT, W.H., H. LALANDE, A. DUFRESNE, 1984. Aluminum speciation and movement in three small watersheds in the southern Laurentians. Water Poll. Res. J. Canada 19(1): p. 11 - 26.
- 1605 HENDREY, G.R., J.N. GALLOWAY, C.L. SCHOFIELD, 1980. Temporal and spatial trends in the chemistry of acidified lakes under ice cover. In: Ecological impact of acid precipitation. Proceedings of an international conference, Sandefjord, Norway, March 11-14, 1980. D. Drablos and A. Tollan (eds.). SNSF project. p. 266 - 267.

(section 3. 3)

- 668 HENRIKSEN, A., R.F. WRIGHT, 1977. Effects of acid precipitation on a small acid lake in southern Norway. Nordic Hydrology 8: p. 1 - 10.
- 435 HORNBECK, J.W., G.E. LIKENS, 1974. The ecosystem concept for determining the importance of chemical composition of snow. In: Advanced Concepts and Techniques in the Study of Snow and Ice Resources. National Academy of Sciences, Washington, D.C. p. 139 - 151.
- 964 JEFFRIES, D.S., R.G. SEMKIN, 1983. Changes in snowpack, stream, and lake chemistry during snowmelt in the Turkey lakes watershed. Turkey lakes watershed study. National Water Research Institute, Burlington, Ont. 24 p.
- 1223 JEFFRIES, D.S., W.A. SCHEIDER, W.R. SNYDER, 1984. Geochemical interactions of watersheds with precipitation in areas affected by smelter emissions near Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J.Nriagu (ed.). p. 195 - 241.
- 1366 JOHANNES, A.E., E.R. ALTWICKER, N.L. CLESCERI, 1985. The integrated lake-watershed acidification study: atmospheric inputs. Water Air Soil Pollut. 26(4): p. 339 - 354.
- 582 JOHANNES, A.H., R.A. GOLDSTEIN, C.W. CHEN. 1981. A watershed approach the EPRI integrated lake watershed acidification study (ILWAS). Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 7 p.
- 1024 JONES, H.G., M. BISSON, 1980. Le lac Laflamme: Qualité de l'eau et de la neige (hiver 1979-1980). INRS-Eau, rapport scientifique no 123 pour Environnement Canada, Direction générale des eaux intérieures, région du Québec. 91 p.
- 1329 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1985. Aspect qualitatif du développement au bassin du lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1984. INRS-EAU, rapport scientifique no. 182. 42 p.

(section 3. 3)

- 1621 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1986. Aspects qualitatif du développement au bassin du lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 142 p.
- 1022 JONES, H.G., W. SOCHANSKA, J.M. GAUTHIER, R. BOUGIE, J.-Y. CHARETTE, 1984. Développement d'une méthodologie d'étude sur les facteurs contrôlant la qualité des eaux de fonte et des eaux de ruissellement printanier au lac Laflamme, Québec. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 145 p.
- 1342 KATZ, B.G., O.P. BRICKER, M.M. KENNEDY, 1985. Geochemical mass-balance relationships for selected ions in precipitation and stream water, Catoctin mountains, Maryland. Am. J. Sci. 285(10): p. 931 - 962.
- 415 KEREKES, J., 1973. Aquatic Resources Inventory Kejimikujik National Park. Part 5. Chemical Composition of Lake and River Waters. Report for Parks Canada by Canadian Wildlife Service, Eastern Region. 66 p.
- 271 KEREKES, J.J., 1980. Preliminary Characterization of three Lake Basins Receiving Acid Precipitation in Nova Scotia. Environment Canada, Canadian Wildlife Service, Halifax. 11 p.
- 721 KEREKES, J. (ed), 1982. Kejimikujik calibrated catchments program on the aquatic and terrestrial effects of the long-range transport of air pollutants. Report of the proceedings, November 18, 1981, Atlantic Region LRTAP Monitoring and Effects working Group. 75 p.
- 1489 LIKENS, G.E., 1985. An experimental approach for the study of ecosystems, the 5th Tansley lecture. J. Ecol. 73(2): p. 381 - 396.
- 1089 LIKENS, G.E., F.H. BORMANN, J.S. EATON, 1980. Variations in precipitation and streamwater chemistry at the Hubbard Brook Experimental Forest during 1964 to 1977. In: Effects of acid precipitation of Terrestrial ecosystems, T.C. Hutchinson and M. Havas (eds). p. 443 - 464.
- 1289 LIKENS, G.E., F.H. BORMANN, R.S. PIERCE, J.S. EATON, R.E. MUNN, 1984. Long-term trends in precipitation chemistry at Hubbard Brook, New Hampshire. Atmospheric Environment 18(12): p. 2641 - 2647.

(section 3. 3)

- 741 MOLLITOR, A.V., D.J. RAYNAL, 1982. Acid precipitation and ionic movements in Adirondack forest soils. Soil Sci. Soc. Am. J. 46(1): p. 137 - 141.
- 1092 MOLLITOR, A.V., D.J. RAYNAL, 1983. Atmospheric deposition and ionic input in Adirondack forests. Journal of the Air Pollution Control Association 33(11): p. 1032 - 1035.
- 1393 NUOTIO, T., J. HYYPPA, J. KAMARI, 1985. Buffering properties of soils in 53 forested catchments in southern Finland. Aqua Fenn. 15(1): p. 35 - 40.
- 690 OGDEN, J.G. III, 1982. Seasonal mass balance of major ions in three small watersheds in a maritime environment. Water, Air and Soil Pollution 17(2): p. 119 - 130.
- 986 PADILLA, F., P. BERNIER, P.J. GELINAS, L.M. AZZARIA, S. GOULET, 1983. Programme des pluies acides: observations hydrogéologiques et géochimiques des eaux souterraines du lac Laflamme durant la fonte de 1983. Université Laval, Département de géologie et Environnement Canada, Direction générale des eaux intérieures, région du Québec. 141 p.
- 989 PAPINEAU, M., 1983. Le bassin du lac Laflamme: caractérisation physico-chimique du lac et établissement du bilan ionique en relation avec le transport à grande distance des polluants atmosphériques. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 95 p.
- 720 PERCY, K.E., J.J. KEREKES (eds), 1981. Kejimikujik calibrated catchments program on the aquatic and terrestrial effects of the long-range transport of air pollutants for 1980-81. 48 p.
- 1377 PETERS, N.E., P.S. MURDOCH, 1985. Hydrogeologic comparison of an acidic lake basin with a neutral lake in the west-central Adirondack mountains, New-York, USA. Water Air Soil Pollut. 26(4): p. 387 - 402.
- 384 PLAMONDON, A., 1981. Etude hydrologique du bassin du lac Laflamme, forêt Montmorency, Québec, en relation avec le programme d'étude d'impact des pluies acides sur l'environnement forestier. Environnement Canada, Direction des eaux intérieures, Québec. 239 p.

(section 3. 3)

- 389 PLAMONDON, A., 1982. La précipitation moyenne sur le bassin du lac Laflamme - forêt Montmorency, Québec. Environnement Canada, Direction des eaux intérieures, Québec. 28 p.
- 765 PLAMONDON, A., M. PREVOST, 1982(b). Interception de la pluie sur le bassin du lac Laflamme, Forêt Montmorency - Étés 1981 et 1982. Environnement Canada, Direction des eaux intérieures. 224 p.
- 396 PLAMONDON, A., M. PREVOST, 1982. Distribution spatiale de la neige et de la fonte 1981 et 1982, lac Laflamme, Forêt Montmorency, Québec. Environnement Canada, Direction des eaux intérieures, Québec. 36 p.
- 1023 PLAMONDON, A., R. BARRY, J. STEIN, 1983. Hydrodynamique du sol minéral sur le bassin du lac Laflamme, forêt Montmorency, Québec. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 147 p.
- 1137 PLAMONDON, A.P., M. PREVOST, R.C. NAUD, 1984. Accumulation et fonte de la neige en milieux boisé et déboisé. Géographie physique et Quaternaire, 38(1): p. 27 - 35.
- 1528 RIGGAN, P.J., R.N. LOCKWOOD, E.N. LOPEZ, 1985. Deposition and processing of airborne nitrogen pollutants in mediterranean-type ecosystems of southern California, USA. Environ. Sci. Technol. 19(9): p. 781 - 789.
- 1624 ROBERGE, J., A.P. PLAMONDON, J. STEIN, 1984. Analyse de l'écoulement de l'eau de fonte sur le versant nord du Lac Laflamme à partir des données journalières de 1981 et 1982. Environnement Canada, Direction des eaux intérieures, Région du Québec. 51 p.
- 1625 ROBERGE, J., J. STEIN, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1984. Environnement Canada, Direction des eaux intérieures, Région du Québec. 34 p.
- 426 ROBITAILLE, R., P. BERNIER, P.J. GELINAS, L.M. AZZARIA, 1983. Etude hydrogéologique du bassin versant du lac Laflamme en 1981. Environnement Canada, Direction générale des eaux intérieures, Québec. 165 p.

(section 3. 3)

- 386 ROBITAILLE, R., J.-F. WILHELMY, 1981. Etude sismique du bassin versant du lac Laflamme, forêt Montmorency, Québec. Environnement Canada, Direction des eaux intérieures, Québec, 18 p.
- 272 SCHEIDER, W.A., W.R. SNYDER, B. CLARK, 1979. Deposition of nutrients and major ions by precipitation in south-central Ontario. Water, Air and Soil Pollution 12: p. 171 - 185.
- 1533 SCHINDLER, D.W., K.H. MILLS, D.F. MALLEY, D.L. FINDLAY, J.A. SHEARER, I.J. DAVIES, M.A. TURNER, G.A. LINSEY, D.R. CRUIKSHANK, 1985. Long-term ecosystem stress; the effects of years of experimental acidification on a small lake. Science (Wash. D.C.) 228(4706): p. 1395 - 1401.
- 278 SCHINDLER, D.W., R.W. NEWBURY, K.G. BEATY, P. CAMPBELL, 1976. Natural Water and Chemical Budgets for a Small Precambrian Lake Basin in Central Canada. J. Fish. Res. Board Can. 33: p. 2526 - 2543.
- 1379 SCHOFIELD, C.L., J.N. GALLOWAY, G.R. HENDRY, 1985. Surface water chemistry in the ILWAS study basins. Water Air Soil Pollut. 26(4): p. 403 - 424.
- 444 SEIP, H.M., A. TOLLAN, 1978. Acid Precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment, 10: p. 253 - 270.
- 393 SKARTVEIT, A., Y.T. GJESSING, 1979. Chemical Budgets and Chemical Quality of Snow and Runoff During Spring Snowmelt. Nordic Hydrology, 10 (2-3): p. 141 - 154.
- 1623 STEIN, J., J. ROBERGE, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 12 p.
- 628 TOKOS, J. 1981., Water analysis methods at the integrated lake watershed acidification study laboratory. Raquette Lake, N.Y. Report no BNL-51396, from Energy Res. Restr., 6(22): 1 microfiche.

(section 3. 3)

- 1618 TROUTMAN, D., N. PETERS, 1980. Comparison of lead, manganese, and zinc transport in three Adirondack lake watersheds, New York. In: Ecological impact of acid precipitation. Proceedings of an international conference, Sandefjord, Norway, March 11-14, 1980. D.Drablos and A. Tollan eds. SNSF project. p. 262 - 263.
- 919 VERREAULT, G., 1982. Etude ichtyologique du lac Laflamme, Parc des Laurentides. Pêches et Océans Canada, Direction de la recherche. 34 p.
- 1025 VERREAULT, G., C. LANGLOIS, 1984. Etude de la population d'Omble de fontaine Salvelinus fontinalis (Mitchill) du lac Laflamme, Parc des Laurentides (Québec). Rapp. techn. can. sci. halieut. aquat. 1316: 61 p.
- 837 WENBLAD, A., 1982. Atmospheric fallout - a reason for increased transport of nitrogen in some rivers in southwest Sweden ?. Vatten 38(2): p. 149 - 155. (En suédois avec résumé en anglais).
- 923 WRIGHT, R.F., 1983. Input-output budgets at Langtjern, a small acidified lake in southern Norway. Hydrobiologia 101: p. 1 - 12.

### 3. 4 Sédiments

- 241 ADAMSKI, J.M., M.F.P. MICHALSKI, 1975. Reclamation of acidified lakes Middle and Lohi, Sudbury, Ontario. Verhandlungen, Internationale Vereinigung für Theoretische und Angewandte limnology 19: p. 1971 - 1983.
- 1231 BAKER, M.D., P.T.S. WONG, W.E. INNIS, C.I. MAYFIELD, 1981. Microbial activity in sediments from acidic Ontario lakes. Can. Tech. Rep. Fish. Aquat. Sci. 1151: p. 1 - 11.
- 942 BAKER, M.D., W.E. INNIS, C.I. MAYFIELD, P.T.S. WONG, 1983. Effect of acidification, metals and metalloids on sediment microorganisms. Water Research 17(8): p. 925 - 930.
- 1428 BANDY, J.T., 1985. Water characteristics. J. Water Pollut. Control Fed. 57(6): p. 494 - 497.
- 102 BROWN, D.J.A., K. SADLER, 1981. The chemistry and fishery status of acid lakes in Norway and their relationship to european sulphur emissions. Journal of Applied Ecology 18: p. 433 - 441.
- 1438 CARIGNAN, R., 1985. Quantitative importance of alkalinity flux from the sediments of acid lakes. Nature 317(6033): p. 158 - 160.
- 1439 CARIGNAN, R., A. TESSIER, 1985. Zinc deposition in acid lakes; the role of diffusion. Science 228(4707): p. 1524 - 1526.
- 1440 CARIGNAN, R., J.O. NRIAGU, 1985. Trace metal deposition and mobility in the sediments of two lakes near Sudbury, Ontario, Canada. Geochimica et Cosmochimica Acta 49(8): p. 1753 - 1764.
- 526 DAVIS, A.O., J.N. GALLOWAY, D.K. NORDSTROM. 1982. Lake acidification: Its effect on lead in the sediment of two Adirondack lakes. Limnol. Oceanogr., 27(1): p. 163 - 167.
- 1449 DAVIS, R.B., D.S. ANDERSON, F. BERGE, 1985. Paleolimnological evidence that lake acidification is accompanied by loss of organic matter. Nature 316(6027): p. 436 - 438.

(section 3. 4)

- 943 DAVIS, R.B., S.A. NORTON, C.T. HESS, D.F. BRAKKE, 1983. Paleolimnological reconstruction of the effects of atmospheric deposition of acids and heavy metals on the chemistry and biology of lakes in New England and Norway. Hydrobiologia 103: p. 113 - 123.
- 563 DEL PRETE, A., C. SCHOFIELD. 1981. The utility of diatom analyses of lake sediments for evaluating acid precipitation effects on dilute lakes. Arch. Hydrobiol., 91(3): p. 332 - 340.
- 1421 DELORME, L.D., S.R. ESTERBY, H. DUTHIE. 1984. Prehistoric pH trends in Kejimikujik lake, Nova Scotia. Int. Rev. Gesamten Hydrobiol 69(1): p. 41 - 55.
- 679 DePINTO, J.V., R.F. GUMINIAK, R.S. HOWELL, J.K. EDZWALD, 1980. Use of microcosms to evaluate acid lake recovery techniques. Giesy, J.P. (ed). DOE Symposium Series, Vol. 52. Microcosms in Ecological Research; Papers from a Symposium, Augusta, U.S.A. Nov. 8-10, 1978. p. 562 - 582.
- 1138 DICKMAN, M., S. DIXIT, J. FORTESCUE, B. BARLOW, J. TERASMAE, 1984. Diatoms as indicators of the rate of lake acidification. Water, Air, and Soil Pollution 21(1-4): p. 375 - 386.
- 1357 DICKMAN, M.D., H.G. THODE, 1985. The rate of lake acidification in four lakes north of Lake Superior, Canada, USA, and its relationship to downcore sulfur isotope ratios. Water, Air, and Soil Pollution 26(3): p. 233 - 254.
- 1065 FLOWER, R.J., R.W. BATTARBEE, 1983. Diatom evidence for recent acidification of two Scottish lochs. Nature 305(5930): p. 130 - 133.
- 939 FORSTNER, U., 1982. Accumulative phases for heavy metals in limnic sediments. Hydrobiologia 91: p. 269 - 284.
- 1304 FURUTANI, A., J.W.M. RUDD, C.A. KELLY, 1984. A method for measuring the response of sediment microbial communities to environmental perturbations. Can. J. Microbiol. 30(11): p. 1408 - 1414.
- 610 GROTERUD, O., 1981. The dynamics of acidification from a new view elucidated by studies in a lake area in Norway. Verh. Internat. Verein. Limnol., 21: p. 406 - 411.

(section 3. 4)

- 1126 HARTE, J., J. HOLDREN, K. TONNESSON, 1983. The potential for acid-precipitation damage to lakes of the Sierra Nevada, California. University of California, lth, 16: p. 164 - 169.
- 794 HAVAS, M., T.C. HUTCHINSON, 1983. The Smoking Hills: natural acidification of an aquatic ecosystem. Nature, 301(5895): p. 23 - 27.
- 215 HEIT, M., Y. TAN, C. KLUSEK, J.C. BURKE, 1981. Anthropogenic trace elements and polycyclic aromatic hydrocarbon levels in sediment cores from two lakes in the Adirondack acid lake region. Water, Air and Soil Pollution 15(4): p. 441 - 464.
- 1299 HOLDREN JR, G.R., T.M. BRUNELLE, G. MATISOFF, M. WAHLEN, 1984. Timing the increase in atmospheric sulphur deposition in the Adirondack mountains. Nature 311: p. 245 - 248.
- 1063 HUTTUNEN, P., J. MERILAINEN, 1983. Interpretation of lake quality from contemporary diatom assemblages. Hydrobiologia 103: p. 91 - 97.
- 1128 KAHL, J.S., S.A. NORTON, 1983. Metal input and Mobilization in two acid-stressed lake watersheds in Maine. Land and Water Resources Center, University of Maine at Orono. PB8320825 6. 70 p.
- 1321 KELLY, C.A., J.W.M. RUDD, A. FURUTANI, D.W. SCHINDLER, 1984. Effects of lake acidification on rates of organic matter decomposition in sediments. Limnology and Oceanography 29(4): p. 687 - 694.
- 320 KRAMER, J.R., 1976. Geochemical and lithological factors in acid precipitation. USDA Forest Service Gen. Tech. Rep NE-23: p. 611 - 618.
- 1265 KRAUSE-DELLIN, D., C. STEINBERG, 1984. Evidence of lake acidification by a novel biological pH-meter. Environmental Technology Letters 5(9): p. 403 - 406.
- 340 MAHARA, Y., A. KUDO, 1981. Interaction and mobility of cobalt-60 between water and sediments in marine environments possible effects by acid rain. Water Research 15(4): p. 413 - 419.

(section 3. 4)

- 1122 MITCHELL, M.J., 1982. Effect of atmospheric sulfur pollutants derived from acid precipitation on the benthic dynamics of lakes. State University of New York, Syracuse, N.Y. Final Report to Bureau of Reclamation, U.S. Department of the Interior, Washington. PB83-208322. 24 p.
- 808 MITCHELL, M.J., D.H. LANDERS, 1981. Inorganic and organic sulfur constituents of soils and sediments and their relationships to acid precipitation and coal utilization. In: Proceedings government conference. Expanding use coal, N.Y. State: Problems issues. p. 55 - 60.
- 640 MITCHELL, M.J., D.H. LANDERS, D.F. BRODOWSKI, 1981. Sulfur constituents of sediments and their relationship to lake acidification. Water, Air and Soil Pollution, 16(3): p. 351 - 359.
- 1161 NORTON, D., R. DAVIS, F. BRAKKE, 1982. Responses of Northern New-England lakes to atmospheric inputs of acids and heavy metals. Orono, Maine: Land and Water resources Center, University of Maine at Orono, 2 microfiches.
- 1346 NORTON, S.A., J.S. KAHL, R.F. WRIGHT, R.B. DAVIS, 1985. Sediment and lakewater chemistry; interdependencies. Abstr. Pap. Am. Chem. Soc. 190.
- 775 NRIAGU, J.O., H.K.T. WONG, R.D. COKER, 1982. Deposition and chemistry of pollutant metals in lakes around the smelters at Sudbury, Ontario. Environmental Science and Technology, 16(9): p. 551 - 560.
- 962 NRIAGU, J.O., R.D. COKER, 1983. Sulphur in sediments chronicles past changes in lake acidification. Nature 303: p. 692 - 694.
- 948 OLIVER, B.G., J.R.M. KELSO, 1983. A role for sediments in retarding the acidification of headwater lakes. Water, Air, and Soil Pollution 20(4): p. 379 - 389.
- 231 OUELLET, M., 1980. Long-Range Atmospheric Transport of Heavy Metals in Quebec as Revealed by Paleo-limnological Studies of Lake Sediments. INRS-Eau, 9 p.

(section 3. 4)

- 419 OUELLET, M., 1980. Quelques aspects paléolimnologiques des sédiments les plus récents du lac Laflamme (Parc des Laurentides, Québec) en fonction du transport atmosphérique de substances polluantes. Rapport scientifique no 132, rédigé pour Environnement Canada. 76 p.
- 129 OUELLET, M., H.G. JONES, 1981. Indices paléolimnologiques de l'acidification des eaux lacustres. Rapport d'activités pour la période d'avril 1980 à mars 1981. Présenté au Ministère de l'Environnement du Québec. 36 p.
- 873 OUELLET, M., H.G. JONES, 1982. Evidence paléolimnologique de transport atmosphérique longue portée de polluants acidifiants et de métaux traces. Eau du Québec 15(4): p. 356 - 368.
- 1056 OUELLET, M., H.G. JONES, 1983. Historical changes in acid precipitation and heavy metals deposition originating from fossil fuel combustion in eastern north America as revealed by lake sediment geochemistry. Wat. Sci. Tech. 15(12): p. 115 - 130.
- 232 OUELLET, M., M. DICKMAN, 1980. The Impact of Lake Acidification as Reflected by the Fossil Microbiota of Lac Laflamme. Québec: 6 p.
- 1347 RAMLAL, P.S., J.W.M. RUDD, A. FURUTANI, L. XUN, 1985. The effect of pH on methyl mercury production and decomposition in lake sediments. Can. J. Fish. Aquat. Sci. 42(4): p. 685 - 692.
- 1280 RAO, S.S., A.A. JURKOVIC, J.O. NRIAGU, 1984. Bacterial activity in sediments of lakes receiving acid precipitation. Environ. Pollut. (Series A) 36(3): p. 195 - 205.
- 913 REUTHER, R., R.F. WRIGHT, U. FORSTNER, 1981. Distribution and chemical forms of heavy metals in sediment cores from two norwegian lakes affected by acid precipitation. In: International conference on heavy metals in the environment, Amsterdam, September 1981. Edinburg, Scotland: CEP Consultants Ltd, p. 318 - 321.
- 891 SHILTS, W.W., 1982. Relevés sonar des sédiments des lacs du Québec en regard des précipitations acides. Eau du Québec 15(4): p. 369 - 375.

(section 3. 4)

- 782 SHILTS, W.W., L.E. FARRELL, 1982. Subbottom profiling of canadian shield lakes-implications for interpreting effects of acid rain. Geological Survey of Canada Paper, 82-IB: p. 209 - 221.
- 1064 SMOL, J.P., D.F. CHARLES, D.R. WHITEHEAD, 1984. Mallomonadacean microfossils provide evidence of recent lake acidification. Nature 307(5952): p. 628 - 630.
- 1519 STEINBERG, C., H. HARTMANN, 1986. A biological paleoindicator for early lake acidification; Mallomonadacean chrysophyceae scale abundance in sediments. Naturwissenschaften 73(1): p. 37 - 39.
- 933 TOLONEN, K., T. JAAKKOLA, 1983. History of lake acidification and air pollution studied on sediments in South Finland. Ann. Bot. Fennici 20(1): p. 57 - 78.
- 938 WALICHNOWSKI, A.Z., S.G. LAWRENCE, 1982. Studies into the effects of cadmium and low pH upon methane production. Hydrobiologia 92: p. 559 - 569.
- 1416 WHITEHEAD, D.R., D.F. CHARLES, 1985. The recent acidification of Adirondack lakes, USA; paleoecological approaches. Abstr. Pap. Am. Chem. Soc. 190.
- 1384 WOOD, J.M., 1985. Effects of acidification on the mobility of metals and metalloids; an overview. Environ. Health Perspect. 63: p. 115 - 120.

### 3. 5 Capacité tampon et sensibilité du milieu

- 1394 ARNOLD, D.E., R.W. LIGHT, E.A. PAUL, 1985. Vulnerability of selected lakes and streams in the middle atlantic region to acidification - a regional survey. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(19): p. I - XII, 1 - 133.
- 283 AUCLAIR, J.C., M. BISSON, M. LACHANCE, 1982. Etude des variations de l'alcalinité des lacs de tête de la région de Québec. INRS-Eau, rapport scientifique no 139. 51 p.
- 987 BOBEE, B., M. LACHANCE, J. HAEMMERLI, A. TESSIER, J.-Y. CHARETTE, J. KRAMER, 1983. Evaluation de la sensibilité à l'acidification des lacs du sud du Québec et incidences sur le réseau d'acquisition de données. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 203 p.
- 982 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. The nature and extent of acidification in Quebec Lakes. INRS-Eau, scientific report no 140 for the Ministère de l'Environnement du Québec, Service de la qualité des eaux. 210 p.
- 128 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. Nature et étendue de l'acidification des lacs du Québec. INRS-Eau, rapport scientifique no 140, pour le ministère de l'Environnement du Québec, Service de la qualité des eaux. 243 p.
- 971 BOOTY, W.G., 1983. Watershed acidification model and the soil acid neutralization capacity concept. Ph. D. Thesis, McMaster University, Hamilton, Ont. 194 p.
- 1629 BRICKER, O.P., 1984. Geological aspects of acid deposition. Acid Precipitation Series - Volume 7. John I. Teasley (ed.). Butterworth Publishers, Toronto. 142 p.
- 1434 BROUSSEAU, C.S., D. BACCANTE, L.W. MAKI, 1985. Role of bedrock and surficial geology in determining the sensitivity of Thunder Bay area Canada lakes to acidification. J. Great Lakes Res. 11(4): p. 501 - 507.
- 992 CANFIELD, Jr, D.E., 1983. Sensitivity of Florida lakes to acidic precipitation. Water Resources Research 19(3): p. 833 - 839.

(section 3. 5)

- 132 CLAIR, T.A., D.R. ENGSTROM, 1982. Sensitivity of Surface Waters of Newfoundland and Labrador to Acid Precipitation. Water Quality Branch, Environment Canada, Moncton, N.B. 36 p.
- 437 COKER, W.B., W.W. SHILTS, 1979. Lacustrine geochemistry around the north shore of lake Superior: Implications for evaluation of the effects of acid precipitation. In: Current Research, Part C, Geological Survey of Canada, Paper 79-1C. p. 1 - 15.
- 73 CONROY, N., D.S. JEFFRIES, J.R. KRAMER, 1974. Acid Shield Lakes in the Sudbury Ontario Region. Water Pollution Research in Canada Proc. 9th Canadian Symp. 9: p. 45 - 61.
- 130 COWELL, D.W., A.E. LUCAS, C.D.A. RUBEC, 1981. Etablissement d'une échelle de vulnérabilité écologique aux précipitations acides. Etude d'impact. Document de travail no. 10 Direction générale des terres. Environnement Canada. 44 p.
- 1451 DEANO, P. M., J.W. ROBINSON, 1985. The effect of decaying leaves on the pH and buffer capacity of waters. J. Environ. Sci. Health. Part A. Environ. Sci. Eng. 20(8): p. 903 - 912.
- 1606 DELISLE, C.E., M.A. BOUCHARD, P. ANDRE, 1984. Les précipitations acides et leurs effets au nord du 55ème parallèle du Québec. Ecole Polytechnique de Montréal et l'Université de Montréal. Rapport présenté à la fondation canadienne Donner. Janvier 1984. 134 p.
- 679 DePINTO, J.V., R.F. GUMINIAK, R.S. HOWELL, J.K. EDZWALD, 1980. Use of microcosms to evaluate acid lake recovery techniques. Giesy, J.P. (ed). DOE Symposium Series, Vol. 52. Microcosms in Ecological Research; Papers from a Symposium, Augusta, U.S.A. Nov. 8-10, 1978. p. 562 - 582.
- 603 DILLON, P.J., D.S. JEFFRIES, W. SNYDER, R. REID, N.D. YAN, ET AL., 1978. Acidic Precipitation in South - Central Ontario: Recent Observations. Journal Fisheries Research Board of Canada 35: p. 809 - 815.
- 292 DOVLAND, H., A. SEMB, 1978. Deposition and runoff of sulphate in the Tovdal river. A study of the mass balance for September 1974 - August 1976, SNSF-Project, rapport IR 38/78, Oslo. 22 p.

(section 3. 5)

- 1616 DRISCOLL, C.T., G.C. SCHAFFRAN, 1984. Short-term changes in the base neutralizing capacity of an acid Adirondack lake, New York. Nature 310: p. 308 - 310.
- 1061 EILERS, J.M., G.E. GLASS, K.E. WEBSTER, J.A. ROGALLA, 1983. Hydrologic control of lake susceptibility to acidification. Can. J. Fish. Aquat. Sci. 40(11): p. 1896 - 1904.
- 1186 FAUST, S.D., 1983. Total alkalinity versus buffer value (capacity) as a sensitivity indicator for fresh waters receiving acid rain. J. Environ. Sci. Health, A18(5): p. 701 - 711.
- 1359 FEDERER, C.A., J.W. HORNBECK, 1985. The buffer capacity of forest soils in New-England, USA. Water Air Soil Pollut. 26(2): p. 163 - 174.
- 443 GLASS, N.R., D.E. ARNOLD, J.N. GALLOWAY, G.R. HENDREY, J.J. LEE, W.W. McFEE, S.A. NORTON, C.F. POWERS, D.L. RAMBO, C.L. SCHOFIELD. 1982. Effects of acid precipitation. Environmental Science and Technology, 16(3): p. 162A - 169A.
- 557 GRIMARD, Y., 1981. Contribution à l'étude de la vulnérabilité des eaux lacustres québécoises face à l'acidification des précipitations. 81-6. Ministère de l'environnement, Service de la qualité des eaux, Québec. 38 p.
- 961 HAEMMERLI, J., 1983. Principales caractéristiques du réseau TADPA de qualité des eaux de surface - volet québécois. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 9 p.
- 1365 HARTE, J., G.P. LOCKETT, R.A. SCHNEIDER, H. MICHAELS, C. BLANCHARD, 1985. Acid precipitation and surface-water vulnerability on the western slope of the High Colorado USA Rockies. Water Air Soil Pollut. 25(3): p. 313 - 320.
- 1234 HARTLEN, J., T. LUNDGREN, 1983. Disposal of waste material - Evaluation in the KHM project of short and long-term effects. Wat. Sci. Tech. 15(11): p. 49 - 63.

(section 3. 5)

- 674 HENDREY, G.R., J.N. GALLOWAY, S.A. NORTON, C.L. SCHOFIELD, P.W. SHAFFER, D.A. BURNS, 1980. Geological and hydrochemical sensitivity of the eastern United States to acid precipitation. Brookhaven National Laboratory; Upton, N.Y.; U.S. Environmental Protection Agency, EPA-600/3-80-024. 90 p.
- 1 HENRIKSEN, A., 1979. A simple Approach for Identifying and Measuring Acidification of Freshwater. Nature (April 1979). 278 p.
- 1341 HERN, J.A., G.K. RUTHERFORD, G.W. VANLOON, 1985. Chemical and pedogenetic effects of simulated acid precipitation on two eastern canadian forest soils. I. Nonmetals. Can. J. For. Res. 15(5): p. 839 - 847.
- 463 HESSLEIN, R.H., 1979. Lake Acidification Potential in the Alberta Oil Sands Environmental Research Program Study Area. Alberta Oil Sands Environmental Research Program, 26 p.
- 70 JOHNSON, N.M., 1979. Acid Rain: Neutralization Within the Hubbard Brook Ecosystem and Regional Implications. Science 204 (4392): p. 497 - 499.
- 107 KAPLAN, E., H.C. THODE JR., A. PROTAS, 1981. Rocks, Soils, and Water Quality. Relationships and Implications for Effects of Acid Precipitation on Surface Water in the Northeastern United States. Environ. Sci. Technol. 15(5): p. 539 - 544.
- 1342 KATZ, B.G., O.P. BRICKER, M.M. KENNEDY, 1985. Geochemical mass-balance relationships for selected ions in precipitation and stream water, Catoctin mountains, Maryland. Am. J. Sci. 285(10): p.931 - 962.
- 833 KRAMER, J., 1982. Chimie de l'eau et acidification. Eau du Québec 15(4): p. 342 - 349.
- 493 KRAMER, J.R., 1981. Calcite Saturation Index, Alkalinity and Alkalinity Corrections to Previous Data. Environmental Geochemistry Report. McMaster University, Department of Geology. 7 p.
- 320 KRAMER, J.R., 1976. Geochemical and lithological factors in acid precipitation. USDA Forest Service Gen. Tech. Rep NE-23: p. 611 - 618.

(section 3. 5)

- 452 KRAMER, J.R., W.G. Booty, S. Stroes, 1981. Acid neutralizing capacity of line soil fractions. In: Atmospheric pollutants in natural waters, Ann Arbor Science Publishers, Michigan, ISBN 0-250-40369-2. p. 327 - 337.
- 1368 LAU, W.M., S.J. MAINWARING, 1985. The determination of soil sensitivity to acid deposition. Water Air Soil Pollut. 25(4): p. 451 - 464.
- 1020 LUCAS, A.E., D.W. COWELL, 1982. Regional assessment of sensitivity to acidic deposition for eastern Canada. Presented at the Acid Precipitation Symposium, American Chemical Society, Las Vegas. 26 p.
- 1494 MACHELL, J.R., J.F. WILTSHIRE, D. WALTER, R. DONALD, 1985. A study of acidification in seven lakes in mainland, Nova Scotia, 1979-1981. Canada, Environment Canada, Environment Protection Service, EPS-5-AR-85-1. 107 p.
- 12 MALMER, N., 1976. Acid Precipitation: Chemical Changes in the Soil. Ambio 5(5-6): p. 231 - 234.
- 459 McFEE, W.W., 1980. Sensitivity of Soil Regions to Acid Precipitation. EPA-600/3 80-013, Corvallis Environmental Research Laboratory: 178 p.
- 1105 McFEE, W.W., 1983. Sensitivity ratings of soils to acid deposition: A review. Environmental and Experimental Botany 23(3): p. 203 - 210.
- 98 McFEE, W.W., J.M. KELLY, 1977. Air pollution: Impact on soils. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 203 - 207.
- 1344 MELACK, J.M., J.L. STODDARD, C.A. OCHS, 1985. Major ion chemistry and sensitivity to acid precipitation of Sierra Nevada lakes. Water Resources Res. 21(1): p. 27 - 32.
- 841 MOSELLO, R., G. TARTARI, 1983. Effets des précipitations acides sur les lacs subalpins et alpins. Bulletin de la Qualité des Eaux VIII(2): p. 96 - 100.
- 1628 NODVIN, S.C., C.T. DRISCOLL, G.E. LIKENS, 1986. The effect of pH on sulfate adsorption by a forest soil. Soil Science, 142(2): p. 69 - 75.

(section 3. 5)

- 1393 NUOTIO, T., J. HYYPPA, J. KAMARI, 1985. Buffering properties of soils in 53 forested catchments in southern Finland. Aqua Fenn. 15(1): p. 35 - 40.
- 1523 RECHCIGL, J.E., D.L. SPARKS, 1985. Effect of acid rain on the soil environment; a review. Commun. Soil Sci. Plant Anal. 16(7): p. 653 - 680.
- 436 ROSENQVIST, I.T., 1978. Alternative Sources for Acidification of River Water in Norway. The Science of the Total Environment, 10: p. 39 - 49.
- 619 RUBEC, C.D.A., 1981. Les caractéristiques des écosystèmes terrestres par les précipitations acides au Canada. Document de travail no 19. Environnement Canada, Direction générale des terres. 32 p.
- 1348 RUTHERFORD, G.K., G.W. VANLOON, S.F. MORTENSEN, J.A. HERN, 1985. Chemical and pedogenetic effects of simulated acid precipitation on two eastern canadian forest soils. II. Metals. Can. J. For. Res. 15(5): p. 848 - 854.
- 1272 STUANES, A.O., 1984. A simple extraction as an indication of soils sensitivity to acid precipitation. Acta Agric. Scand., 34: p. 113 - 127.
- 1545 STUMM, W., K.J. IRGOLIC, A.E. MARTELL, 1985. Deposition of atmospheric and metal pollutants and their impact on freshwater environment; case studies in Switzerland. Environ. Inorg. Chem., (Pap. U.S.-Italy Jt. Sem. Workshop, 1983), p. 401 - 417.
- 1546 SULLIVAN, M.A., S.C. SAMIS, J.A. SERVIZI, R.W. GORDON, 1985. A survey of selected British-Columbia and Yukon salmon Canada streams for sensitivity to acidification from precipitation. Can. Tech. Fish. Aquat. Sci. 1388: p. I - IX, 1 - 105.
- 94 SYLVESTRE, A., 1981. Interprétation des données physico-chimiques de 24 lacs du Sud du Québec étudiés dans le cadre du programme des précipitations acides du service canadien de la faune. Environnement Canada, Service canadien de la faune, Région du Québec. 110 p.
- 2 THOMPSON, M.E., 1979. Acidic Atmospheric Precipitation: Evaluation of its Impact on Some Canadian Surface Waters. National Water Research Institute: 14 p.

(section 3. 5)

- 464 THOMPSON, M.E., 1981. The Cation Denudation Rate as a Quantitative Index of Vulnerability of Aquatic Systems to Acid Precipitation. National Water Research Institute, Burlington, Ontario. 12 p.
- 530 THOMPSON, M.E., 1981. The cation denudation rate as a quantitative index of sensitivity of eastern canadian rivers to acidic atmospheric precipitation. National Water Institute, Burlington, Ontario. 20 p.
- 496 THOMPSON, M.E., F.C. ELDER, A.R. DAVIS, S. WHITLOW, 1980. Evidence of Acidification of Rivers of Eastern Canada. National Water Research Institute, Burlington, Ontario.
- 1010 ULRICH, B., 1983. Effects of acid deposition. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 31 - 41.
- 1553 VESELY, J., V. DUBANEK, 1985. Influence of the geological composition of the basement on pH and specific conductivity of surface water. Vestn. Ustred. Ustavu Geol. 60(5): p. 267 - 276.
- 72 WRIGHT, R.F., A. HENRIKSEN, 1978. Chemistry of Small Norwegian Lakes, With Special Reference to Acid Precipitation. Limnology Oceanography 23(3): p. 487 - 498.
- 304 WRIGHT, R.F., C. LYSHOLM, 1975. Regional survey of lakes in southern Norway, fall 1974. Preliminary analysis of waterchemistry data, SNSF Project, Rapport IR 6/75, Oslo. 24 p.
- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.

### 3. 6 Sols et géologie

- 1566 ABRAHAMSEN, G., A. STUANES, 1980. Effects of simulated rain on the effluent from lysimeters with acid, shallow soil, rich in organic matter. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 152 - 153.
- 154 ABRAHAMSEN, G., K. BJOR, R. HORNTVEDT, B. TVEITE, 1976. Effects of Acid Precipitation on Coniferous Forest. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F.(Ed). Research Report 6/76, p. 37 - 63.
- 298 ABRAHAMSEN, G., K. BJOR, O. TEIGEN, 1976. Field experiments with simulated acid rain in forest ecosystems. SNSF-Project, Rapport 4/76, Oslo: 15 p.
- 303 ABRAHAMSEN, G., R. HORNTVEDT, B. TVEITE, 1975. Impacts of acid precipitation on coniferous forest ecosystems. SNSF-Project, Rapport 2/75, Oslo: 15 p.
- 1333 AFIFI, A.A., 1985. Surface chemistry approach to study sulfate retention and mobilization in forested watershed soils. 190th American Chemical Society National Meeting, Chicago, Ill., USA, sept. 8-13, 1985.
- 458 ARNOLD, D.E., R.W. LIGHT, V.J. DYMOND, 1980. Probable Effects of Acid Precipitation on Pennsylvania Waters. EPA-600/3 80-012, Corvallis Environmental Research Laboratory: 20 p.
- 927 ARP, P.A., 1983. Modelling the effects of acid precipitation on soil leachates: a simple approach. Ecological Modelling, 19(2): p. 105 - 117.
- 926 ARP, P.A., S. RAMNARINE, 1983. Verifying the effect of acid precipitation on soil leachates: a comparison between published records and model predictions. Ecological Modelling 19(2): p. 119 - 138.
- 198 BAKER, J., D. HOCKING, M. NYBORG, 1977. Acidity of Open and Intercepted Precipitation in Forests and Effects on Forest Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 449 - 460.

(section 3. 6)

- 1096 BEWLEY, R.J.F., G. STOTZKY, 1983. Anionic constituents of acid rain and microbial activity in soil. Soil. Biol. Biochem. 15(4): p. 431 - 437.
- 1164 BEWLEY, R.J.F., G. STOTZKY, 1983. Effects of combinations of simulated acid rain and cadmium or zinc on microbial activity in soil. Environmental Research 31(2): p. 332 - 339.
- 1194 BEWLEY, R.J.F., G. STOTZKY, 1983. Simulated acid rain (H<sub>2</sub>SO<sub>4</sub>) and microbial activity in soil. Soil. Biol. Biochem. 15(4): p. 425 - 429.
- 1431 BLOOM, P.R., D.F. GRIGAL, 1985. Modelling soil response to acidic deposition in nonsulfate adsorbing soils. J. Environ. Qual. 14(4): p. 489 - 495.
- 801 BOSATTA, E., 1982. Acidification and release of nutrients from organic matter - a model analysis. Oecologia, 55(1): p. 30 - 33.
- 1257 BOTTOMLEY, D.J., D. CRAIG, L.M. JOHNSTON, 1984. Neutralization of acid runoff by groundwater discharge to streams in canadian precambrian shield watersheds. J. Hydrol., 75: p. 1 - 26.
- 1565 BRAEKKE, F.H., 1980. Sulphate dynamics in natural environments; preliminary results from a case study. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 156 - 157.
- 1629 BRICKER, O.P., 1984. Geological aspects of acid deposition. Acid Precipitation Series - Volume 7. John I. Teasley (ed.). Butterworth Publishers, Toronto. 142 p.
- 1434 BROUSSEAU, C.S., D. BACCANTE, L.W. MAKI, 1985. Role of bedrock and surficial geology in determining the sensitivity of Thunder Bay area Canada lakes to acidification. J. Great Lakes Res. 11(4): p. 501 - 507.
- 339 BRYANT, R.D., E.A. GORDY, E.J. LAISHLEY, 1979. Effect of Soil Acidification on the Soil Microflora. Water, Air and Soil Pollution 11 (4): p. 437 - 445.

(section 3. 6)

- 360 BUDD, W.W., A.H., JOHNSON, J.B. HUSS, R.S. TURNER, 1981. Aluminum in Precipitation, Streams, and Shallow Groundwater in the New Jersey Pine Barrens. Water Resources Research 17(4): p. 1179 - 1183.
- 1143 CHANG, F.-H., M. ALEXANDER, 1983. Effect of simulated acid precipitation on algal fixation of nitrogen and carbon dioxide in forest soils. Environmental Science and Technology, 17(1): p. 11 - 13.
- 1241 CHANG, F.-H., M. ALEXANDER, 1984. Effects of simulated acid precipitation on decomposition and leaching of organic carbon in forest soils. Soil Science 138(3): p. 226 - 234.
- 1258 CHERTOV, O.G., G.P. MEN'SHIKOVA, 1984. Change in forest soils under the action of acid rain. Biol. Bull. Acad. Sci. U.S.S.R. 10(6): p. 532 - 538.
- 743 CHRISTOPHERSEN, N., A.O. STUANES, R.F. WRIGHT, 1982. Runoff Chemistry at a Mini - Catchment Watered with "Unpolluted Precipitation". Nordic Hydrology 13: p. 115 - 128.
- 742 CHRISTOPHERSEN, N., H.M. SEIP, C. QVENILD, O. TOLLAN, 1982. Sodium mobility in a mini - catchment studied with radioactive tracers and artificial precipitation. Nordic Hydrology 13: p. 105 - 114.
- 132 CLAIR, T.A., D.R. ENGSTROM, 1982. Sensitivity of Surface Waters of Newfoundland and Labrador to Acid Precipitation. Water Quality Branch, Environment Canada, Moncton, N.B. 36 p.
- 137 CLAIR, T.A., J.P. WITTEMAN, S.H. WHITLOW, 1982. Acid Precipitation Sensitivity of Canada's Atlantic Provinces. Inland Waters Directorate Technical Bulletin no 124, Environment Canada, Ottawa. 23 p.
- 1445 COHEN, M., 1985. The leaching of heavy metals from soils due to acid rain and its effect on the aquatic ecosystem. Bull. N.J. Acad. Sci. 30(2): p. 94.
- 437 COKER, W.B., W.W. SHILTS, 1979. Lacustrine geochemistry around the north shore of lake Superior: Implications for evaluation of the effects of acid precipitation. In: Current Research, Part C, Geological Survey of Canada, Paper 79-1C. p. 1 - 15.

(section 3. 6)

- 1107 COLEMAN, D.C., 1983. The impacts of acid deposition on soil biota and C cycling. Environmental and Experimental Botany 23(2): p. 225 - 233.
- 152 CONROY, N., L. MAKI, 1974. Extensive and Intensive Lake Studies in the Sudbury Area. Ontario Industrial Waste Conference: p. 138 - 143.
- 1336 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.F. WRIGHT, 1985. Modeling the effects of acid deposition: Assessment of a lumped parameter model of soil water and stream chemistry. Water Resour. Res. 21(1): p. 51 - 63.
- 1612 COURCHESNE, F., W. HENDERSHOT, 1987. Potentiel d'adsorption et de désorption des sulfates dans les horizons supérieurs du sol au bassin du lac Laflamme. Environnement Canada, Direction des eaux intérieures, Région du Québec. 35 p.
- 130 COWELL, D.W., A.E. LUCAS, C.D.A. RUBEC, 1981. Etablissement d'une échelle de vulnérabilité écologique aux précipitations acides. Etude d'impact. Document de travail no. 10 Direction générale des terres. Environnement Canada. 44 p.
- 925 CRAMPTON, C.B., 1983. Variations of pH with annual precipitation in loamy forest soils. Canadian Journal of Soil Science 63(2): p. 401 - 403.
- 1446 CRONAN, C.S., 1985. Comparative effects of precipitation acidity on three forest soils carbon cycling responses. Plant Soil 88(1): p. 101 - 112.
- 1356 CRONAN, C.S., 1985. Biogeochemical influence of vegetation and soils in the ILWAS watersheds. Water Air Soil Pollut. 26(4): p. 355 - 372.
- 1447 CRONAN, C.S., G.R. AIKEN, 1985. Chemistry and transport of soluble humic substances in forested watersheds of the Adirondack park, New-York, USA. Geochimica et Cosmochimica Acta 49(8): p. 1697 - 1706.
- 1606 DELISLE, C.E., M.A. BOUCHARD, P. ANDRE, 1984. Les précipitations acides et leurs effets au nord du 55ème parallèle du Québec. Ecole Polytechnique de Montréal et l'Université de Montréal. Rapport présenté à la fondation canadienne Donner. Janvier 1984. 134 p.

(section 3. 6)

- 1150 DERRICK, M.R., J.L. MOYERS, K.A. YARBOROUGH, M. WARREN, 1984. Aerosol and precipitation chemistry relationships at Big Bend National Park. Water, Air, and Soil Pollution 21(1 - 4): p. 171 - 181.
- 1453 DETHIER, D.P., S.B. JONES, 1985. Atmospheric and weathering contributions to stream chemistry northwestern Massachusetts, USA. Northeast Environ. Sci. 4(1): p. 8 - 17.
- 371 DOBRZANSKI, B., J. WONDRAUSCH, 1953. Soluble Aluminium in Soils of the Flish Area. (Résumé en anglais). Ann. Univ. M. Curie Sklodowska, 8(8): p. 263 - 281.
- 995 DUFRESNE, A., H. LALANDE, W.H. HENDERSHOT, 1984. Mobilité et spéciation de l'aluminium. Région des basses Laurentides. Rapport d'étape présenté à Environnement Canada, Direction générale des eaux intérieures, Département de géographie, Université de Montréal. 68 p.
- 207 ERIKSSON, E., 1981. Aluminium in Groundwater Possible Solution Equilibria. Nordic Hydrology 12(1): p. 43 - 50.
- 1338 ESHLEMAN, K.N., H.F. HEMOND, 1985. The role of organic acids in the acid-base status of surface waters at Bickford watershed, Massachusetts. Water Resources Research 21(10): p. 1503 - 1510.
- 1564 FARRELL, E.P., I. NILSSON, C.O. TAMM, G. WIKLANDER, 1980. Effects of artificial acidification with sulfuric acid on soil chemistry in a Scots pine forest. In: Ecological impact of acid precipitation. Proceeding of an international conference. Sandefjord, Norway, March 11-14, 1980. D. Drablos and A. Tollan (eds.). p. 186 - 187.
- 1457 FAUST, S.D., R. SCHMIDT, 1985. Geochemical control of hydrogen ion in lakes receiving acidic deposition. J. Environ. Sci. Health part A. Environ. Sci. Eng. 20(6): p. 599 - 616.
- 1359 FEDERER, C.A., J.W. HORNBECK, 1985. The buffer capacity of forest soils in New-England, USA. Water Air Soil Pollut. 26(2): p. 163 - 174.
- 928 FITZGERALD, J.W., T.C. STRICKLAND, W.T. SWANK, 1982. Metabolic fate of inorganic sulphate in soil samples from undisturbed and managed forest ecosystems. Soil Biol. Biochem 14(6): p. 529 - 536.

(section 3. 6)

- 1400 FOSTER, N.W., 1985. Acid precipitation and soil solution chemistry within a maple-birch forest in Canada. For. Ecol. Manage. 12(3-4): p. 215 - 232.
- 514 FRINK, C.R., G.K. VOIGT, 1976. Potential Effects of Acid Precipitation on Soils in the Humid Temperate Zone. In: Proceedings of the First International Symposium on Acid Precipitation and the Forest Ecosystem. USDA Forest Service Tech. Rept. NE23: p. 685 - 709.
- 1401 FULLER, R.D., M.D. DAVID, C.T. DRISCOLL, 1985. Sulfate adsorption relationships in forested spodosols of the northeastern USA. Soil Sci. Soc. Am. J. 49(4): p. 1034 - 1040.
- 724 GAMACHE, D., 1982. Géologie, géomorphologie et végétation forestière de 22 bassins hydrologiques du Parc national de la Mauricie. Direction générale des eaux intérieures, région du Québec. 96 p.
- 443 GLASS, N.R., D.E. ARNOLD, J.N. GALLOWAY, G.R. HENDREY, J.J. LEE, W.W. McFEE, S.A. NORTON, C.F. POWERS, D.L. RAMBO, C.L. SCHOFIELD, 1982. Effects of acid precipitation. Environmental Science and Technology, 16(3): p. 162A - 169A.
- 999 GRAVENHORST, G., A. BOTTGER, 1983. Fields measurements of NO and NO<sub>2</sub> fluxes to and from the ground. In: Acid Deposition, Proceedings of the Commission of the European Communities held in Berlin, September 9, 1982. D. Reidel Publishing Company, Holland. p. 172 - 184.
- 610 GROTERUD, O., 1981. The dynamics of acidification from a new view elucidated by studies in a lake area in Norway. Verh. Internat. Verein. Limnol., 21: p. 406 - 411.
- 575 HAGVAR, S., T. AMUNDSEN. 1981. Effects of liming and artificial acid rain on the mite (Acari) fauna in coniferous forest. Oikos, 37(1): p. 7 - 20.
- 1467 HARI, P., T. RAUNEMAA, A. HAUTOJARVI, 1986. The effects of forest growth of air pollution from energy production. Atmospheric Environment 20(1): p. 129 - 138.
- 1234 HARTLEN, J., T. LUNDGREN, 1983. Disposal of waste material - Evaluation in the KHM project of short and long-term effects. Wat. Sci. Tech. 15(11): p. 49 - 63.

(section 3. 6)

- 794 HAVAS, M., T.C. HUTCHINSON, 1983. The Smoking Hills: natural acidification of an aquatic ecosystem. Nature, 301(5895): p. 23 - 27.
- 1574 HAYES, M.H.B., 1984. Chemical nature and reactivities of soil organic polymers. In: Pollutants in porous media. Springer-Verlag, New-York. B. Yaron, G. Dagan, J. Goldshmid (eds.). p. 126 - 142.
- 1627 HENDERSHOT, W.H., F. COURCHESNE, C. LAPIERRE, L. MENDES, S. SAVOIE, H. LALANDE, 1986. Contribution of the surface horizons of podzols to the quality of surface waters during spring snowmelt. Environment Canada, Inland Waters Directorate, Quebec Region. 59 p.
- 1610 HENDERSHOT, W.H., H. LALANDE, A. DUFRESNE, 1984. Aluminum speciation and movement in three small watersheds in the southern Laurentians. Water Poll. Res. J. Canada 19(1): p. 11 - 26.
- 1626 HENDERSHOT, W.H., H. LALANDE, A. DUFRESNE, C. LAPIERRE, F. COURCHESNE, 1984. Aluminum chemistry in soil solutions and surface waters. McGill University, Department of Renewable Resources, Macdonald College. Pedology Research Group Scientific Report No. 1. 55 p.
- 862 HENRIKSEN, A., L.A. KIRKHUSMO, 1982. Acidification of groundwater in Norway. Nordic Hydrology 13(3): p. 183 - 192.
- 1341 HERN, J.A., G.K. RUTHERFORD, G.W. VANLOON, 1985. Chemical and pedogenetic effects of simulated acid precipitation on two eastern canadian forest soils. I. Nonmetals. Can. J. For. Res. 15(5): p. 839 - 847.
- 1227 HOFFMANN, M., 1984. Recherches sur l'influence de l'eau de pluie sur les eaux phréatiques et les lacs de sablières. Verh. Internat. Verein. Limnol. 22(1): p. 277 - 280.
- 1472 HOOPER, R.P., C.A. SHOEMAKER, 1985. Aluminum mobilization in an acidic headwater stream; temporal variation and mineral dissolution disequilibria. Science 229(4712): p. 463 - 465.
- 305 HOVLAND, J., Y.Z. ISHAC, 1975. Effects of Simulated Acid Precipitation and Liming on Nitrification in Forest Soil. SNSF-Project, Rapport IR 14/75, Oslo. 15 p.

(section 3. 6)

- 206 HULTBERG, H., S. JOHANSSON, 1981. Acid Groundwater. Nordic Hydrology 12(1): p. 51 - 64.
- 580 HUTCHINSON, T.C. 1981. The ecological consequences of acid discharges from industrial smelters. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 13 p.
- 831 HUTTUNEN, S., 1982. Dispersion and effects of airborne sulfur compounds on forest environments in the Uusimaa district (Finland). Luonnon Tutkija, 86(1): p. 39 - 42. (En finnois avec résumé en anglais).
- 302 ISHAC, Y.Z., J. HOVLAND, 1976. Effects of simulated acid precipitation and liming on pine litter decomposition. SNSF-Project, Rapport IR 24/76, Oslo. 20 p.
- 1573 JACKS, G., G. KNUTSSON, L. MAXE, A. FYLKNER, 1984. Effect of acid rain on soil and groundwater in Sweden. In: Pollutants in porous media. Springer-Verlag, New-York. B. Yaron, G. Dagan, J. Goldshmid (eds.). p. 94 - 114.
- 97 JEFFRIES, D.S., C.M. COX, P.J. DILLON, 1979. Depression of pH in Lakes and Streams in Central Ontario during Snowmelt. Journal of the Fisheries Research Board of Canada 36 (6): p. 640 - 646.
- 1223 JEFFRIES, D.S., W.A. SCHEIDER, W.R. SNYDER, 1984. Geochemical interactions of watersheds with precipitation in areas affected by smelter emissions near Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J.Nriagu (ed.). p. 195 - 241.
- 1617 JOHNSON, A.H., R.C. REYNOLDS JR., 1977. Chemical character of headwater streams in Vermont and New Hampshire. Water Resources Research 13(2): p. 469 - 473.
- 140 JOHNSON, D.W., 1981. The natural acidity of some unpolluted waters in southeastern Alaska and potential impacts of acid rain. Water, Air, and Soil Pollution 16(2): p. 243 - 252.
- 194 JOHNSON, D.W., D.W. COLE, 1977. Sulfate mobility in an outwash soil in western Washington. Water, Air, and Soil Pollution 7: p. 489 - 495.

(section 3. 6)

- 1263 JOHNSON, D.W., G.S. HENDERSON, 1979. Sulfate adsorption and sulfur fractions in a highly weathered soil under a mixed deciduous forest. Soil Science 128(1): p. 34 - 40.
- 559 JOHNSON, N.M., C.T. DRISCOLL, J.S. EATON, G.E. LIKENS, W.H. McDOWELL. 1981. Acid rain. Dissolved aluminum and chemical weathering at the Hubbard Brook Experimental Forest, New-Hampshire. Geochimica et Cosmochimica Acta, 45(9): p. 1421 - 1437.
- 1123 JONES, H.C., J.C. NOGGLE, R.C. YOUNG, J.M. KELLY ET AL., 1983. Investigations of the cause of fishkills in fish-rearing facilities in Raven Fork watershed. Tennessee Valley Authority, Division of Air and Water Resources. 60 p.
- 1621 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1986. Aspects qualitatif du développement au Bassin du Lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 142 p.
- 107 KAPLAN, E., H.C. THODE JR., A. PROTAS, 1981. Rocks, soils, and water quality. Relationships and implications for effects of acid precipitation on surface water in the northeastern United States. Environ. Sci. Technol. 15(5): p. 539 - 544.
- 991 KILLHAM, P., 1982. Acid precipitation: Its role in the alkalization of a lake in Michigan. Limnology and Oceanography 27(5): p. 856 - 867.
- 465 KILLHAM, K., M. WAINWRIGHT. 1981. Deciduous leaf litter and cellulose decomposition in soil exposed to heavy atmospheric pollution. Environmental Pollution, 26(1): p. 79 - 85.
- 770 KILLHAM, K., M.K. FIRESTONE, 1982. Evaluation of accelerated H<sup>+</sup> applications in predicting soil chemical and microbial changes due to acid rain. Communications in Soil Science and Plant Analysis, 13(11): p. 995 - 1001.
- 945 KILLHAM, K., M.K. FIRESTONE, J.G. McCOLL, 1983. Acid rain and soil microbial activity: Effects and their mechanisms. J. Environ. Qual. 12(1): p. 133 - 137.

(section 3. 6)

- 1229 KLEIN, T.M., N.J. NOVICK, J.P. KREITINGER, M. ALEXANDER, 1984. Simultaneous inhibition of carbon and nitrogen mineralization in a forest soil by simulated acid precipitation. Bull. Environ. Contam. Toxicol. 32(6): p. 698 - 703.
- 833 KRAMER, J., 1982. Chimie de l'eau et acidification. Eau du Québec 15(4): p. 342 - 349.
- 320 KRAMER, J.R., 1976. Geochemical and lithological factors in acid precipitation. USDA Forest Service Gen. Tech. Rep NE-23: p. 611 - 618.
- 452 KRAMER, J.R., W.G. Booty, S. Stroes, 1981. Acid neutralizing capacity of line soil fractions. In: Atmospheric pollutants in natural waters, Ann Arbor Science Publishers, Michigan, ISBN 0-250-40369-2. p. 327 - 337.
- 1068 KRUG, E.C., C.R. FRINK, 1983. Acid rain on acid soil: A new perspective. Science 221(4610): p. 520 - 525.
- 1601 LAM, D.C.L., A.G. BOBBA, 1985. Modelling watershed runoffs and basin acidification. National Water Research Institute, Burlington, Ontario. 12 p.
- 1368 LAU, W.M., S.J. MAINWARING, 1985. The determination of soil sensitivity to acid deposition. Water Air Soil Pollut. 25(4): p. 451 - 464.
- 1328 LAZERTE, B.D., P.J. DILLON, 1984. Relative importance of anthropogenic versus natural sources of acidity in lakes and streams of central Ontario. Can. J. Fish. Aquat. Sci. 41: p. 1664 - 1677.
- 460 LEE, J.J., D.E. WEBER, 1980. Effects of Sulfuric Acid Rain on two Model Hardwood Forests: Throughfall, Litter Leachate, and Soil Solution. EPA-600/3-80-014, Corvallis Environmental Research Laboratory, 38 p.
- 740 LEE, J.J., D.E. WEBER, 1982. Effects of sulfuric acid rain on major cation and sulfate concentrations of water percolating through two model hardwood forests. J. Environ. Qual., 11(1): p. 57 - 64.
- 1487 LEFOHN, A.S., G.O. KLOCK, 1985. The possible importance of forest soil processes in defining surface water pH depressions. J. Air Pollut. Control Assoc. 35(6): p. 632 - 637.

(section 3. 6)

- 1190 LODENIUS, M., A. SEPPANEN, A. UUSI-RAUVA, 1983. Sorption and mobilization of mercury in peat soil. Chemosphere 12(11-12): p. 1575 - 1581.
- 302 LUNDE, G., J. GETHER, N. GJOS, M.S. LANDE, 1976. Organic micro pollutants in precipitation in Norway. SNSF-Project, Rapport 9/76, Oslo. 17 p.
- 725 MAGNAN, P., 1982. Etude de la sensibilité aux précipitations acides de 22 lacs du Parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 44 p.
- 447 MALMER, N., 1974. On the Effects on Water, Soil and Vegetation of an Increasing Atmospheric Supply of Sulphur. National Swedish Environment Protection Board, SNV-PM-402E, 98 p.
- 12 MALMER, N., 1976. Acid Precipitation: Chemical Changes in the Soil. Ambio 5(5-6): p. 231 - 234.
- 1411 MANDAK, J.S., J.G.III, M.A. PLEVA, J.K. SHILLINGTON, 1985. The interaction of acid rain with the surface rocks of Rockbridge county, Virginia, USA. Va. J. Sci. 36(2): p. 129.
- 1562 MARMOREK, D.R., G. CUNNINGHAM, M.L. JONES, P. BUNNELL, 1984. Smowmelt effects related to acidic precipitation: a structured review of existing knowledge and current research activities. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 117 p.
- 882 MATZNER, E., B. ULRICH, 1981. Balances of annual element fluxes within forest ecosystems in the solling Germany region. Zeitschrift fur Pflanzenermajrimg und Bodenkunde 144(6): p. 660 - 681. (En allemand avec résumé en anglais).
- 1499 MATZNER, E., B. ULRICH, 1985. Implications of the chemical soil conditions for forest decline. Experientia 41(5): p. 578 - 584.
- 248 MAYER, R., B. ULRICH, 1977. Acidity of precipitation as influenced by the filtering of atmospheric sulphur and nitrogen compounds - its role in the element balance and effect on soil. Water, Air and Soil Pollution 7(3): p. 409 - 416.

(section 3. 6)

- 1105 McFEE, W.W., 1983. Sensitivity ratings of soils to acid deposition: A review. Environmental and Experimental Botany 23(3): p. 203 - 210.
- 98 McFEE, W.W., J.M. KELLY, 1977. Air pollution: Impact on soils. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 203 - 207.
- 666 McFEE, W.W., J.M. KELLY, R.H. BECK, 1977. Acid precipitation effects on soil pH and base saturation of exchange sites. Water, Air and Soil Pollution 7: p. 401 - 408.
- 538 McLEAN, R.A.N., 1981. The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem. Implications for Control Strategies. Environmental Sciences Group, Domtar Research Centre, Senneville. 10 p.
- 773 MEIWES, K.J., P.K. KHANNA, 1981. Distribution and cycling of sulphur in the vegetation of two forest ecosystems in an acid rain environment. Plant and Soil, 60(3): p. 369 - 375.
- 808 MITCHELL, M.J., D.H. LANDERS, 1981. Inorganic and organic sulfur constituents of soils and sediments and their relationships to acid precipitation and coal utilization. In: Proceedings government conference. Expanding use coal, N.Y. State: Problems issues. p. 55 - 60.
- 741 MOLLITOR, A.V., D.J. RAYNAL, 1982. Acid precipitation and ionic movements in Adirondack forest soils. Soil Sci. Soc. Am. J. 46(1): p. 137 - 141.
- 841 MOSELLO, R., G. TARTARI, 1983. Effets des précipitations acides sur les lacs subalpins et alpins. Bulletin de la Qualité des Eaux VIII(2): p. 96 - 100.
- 844 MUNGER, J.W., 1982. Chemistry of atmospheric precipitation in the north-central United States: Influence of sulfate, nitrate, ammonia and calcareous soil particulates. Atmospheric Environment 16(7): p. 1633 - 1645.
- 1373 MUSHAK, P., 1985. Potential impact of acid precipitation on arsenic and selenium. Environ. Health Perspect. 63: p. 105 - 114.

(section 3. 6)

- 1066 NILSSON, S.I., B. BERGKVIST, 1983. Aluminium chemistry and acidification processes in a shallow podzol on the swedish westcoast. Water, Air, and Soil Pollution 20(3): p. 311 - 329.
- 788 NILSSON, S.I., H.G. MILLER, J.D. MILLER, 1982. Forest growth as a possible cause of soil and water acidification: an examination of the concepts. Oikos, 39(1): p. 40 - 49.
- 1628 NODVIN, S.C., C.T. DRISCOLL, G.E. LIKENS, 1986. The effect of pH on sulfate adsorption by a forest soil. Soil Science, 142(2): p. 69 - 75.
- 247 NORTON, S.A., 1977. Changes in chemical processes in soils caused by acid precipitation. Water, Air and Soil Pollution 7(3): p. 389 - 400.
- 1242 NOVICK, N.J., T.M. KLEIN, M. ALEXANDER, 1984. Effect of simulated acid precipitation on nitrogen mineralization and nitrification in forest soils. Water, Air, and Soil Pollution 23(3): p. 317 - 330.
- 197 NYBORG, M., J. CREPIN, D. HOCKING, J. BAKER, 1977. Effect of Sulphur Dioxide on Precipitation and on the Sulphur Content and Acidity of Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 439 - 448.
- 92 ODEN, S., 1972. The extent and effects of atmospheric pollution on soils. FAO Soils Bull. 16: p. 179 - 194.
- 592 ODEN, S., 1976. The acidity problem - An outline of concepts. Water, Air, and Soil Pollution 6: p. 137 - 166.
- 423 ODEN, S., T. AHL, 1973. The Acidification of Scandinavian Waters. Fisheries Research Board of Canada, Translation Series no 2535: 32 p.
- 1108 OLSON, R.A., 1983. The impacts of acid deposition on N and S cycling. Environmental and Experimental Botany 23(3): p. 211 - 223.
- 706 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. Acidic precipitation in Ontario study, An Annotated bibliography, Terrestrial effects of acidic precipitation. APIOS report no. 003/81. 181 p.

(section 3. 6)

- 212 OVERREIN, L.N., 1972. Sulphur Pollution Patterns Observed; Leaching of Calcium in Forest Soil Determined. Ambio 1: p. 145 - 147
- 1512 OWNBY, J.D., L. DEES, 1985. Growth and mineral nutrient status in peanut Arachis-hypogaea cultivar spanco and sorghum Sorghum-bicolor cultivar BR-493 in response to acid precipitation and aluminum. New Phytol. 101(2): p. 325 - 332.
- 986 PADILLA, F., P. BERNIER, P.J. GELINAS, L.M. AZZARIA, S. GOULET, 1983. Programme des pluies acides: observations hydrogéologiques et géochimiques des eaux souterraines du lac Laflamme durant la fonte de 1983. Université Laval, Département de géologie et Environnement Canada, Direction générale des eaux intérieures, région du Québec. 141 p.
- 474 PANKO, A.W., 1980. Mercury uptake by Fish in Acidified Lake Ecosystems. In: Environmental Geochemistry Report, McMaster University. 43 p.
- 870 PATILA, A., 1982. Factors influencing the acidification of lakes. Luonnon Tutkija, 86(1): p. 3 - 6. (En finnois avec résumé en anglais).
- 1377 PETERS, N.E., P.S. MURDOCH, 1985. Hydrogeologic comparison of an acidic lake basin with a neutral lake in the west-central Adirondack mountains, New-York, USA. Water Air Soil Pollut. 26(4): p. 387 - 402.
- 754 PETERS, N.E., R.A. SCHROEDER, D.E. TROUTMAN, 1982. Temporal Trends in the Acidity of Precipitation and Surface Waters of New York. United States Geological Survey Water-Supply Paper 2188. 35 p.
- 31 RASMUSSEN, K.H., M. TAHERI, R.L. KABEL, 1975. Global Emission and Natural Processes for Removal of Gaseous Pollutants. Water, Air and Soil Pollution 4: p. 33 - 64.
- 1523 REHCIGL, J.E., D.L. SPARKS, 1985. Effect of acid rain on the soil environment; a review. Commun. Soil Sci. Plant Anal. 16(7): p. 653 - 680.
- 1275 RENEZ, A.N., K.E. PERCY, I.M. KETTLES, 1985. Predicting terrain sensitivity to acid rain: scientists integrate data sets. Geos 1985/1: p. 21 - 25.

(section 3. 6)

- 187 REUSS, J.O., 1977. Chemical and Biological Relationships Relevant to the Effect of Acid Rainfall on the Soil-Plant System. Water, Air and Soil Pollution 7(4): p. 461 - 478.
- 1188 REUSS, J.O., 1983. Implications of the calcium - aluminum exchange system for the effect of acid precipitation on soils. J. Environ. Qual. 12(4): p. 591 - 595.
- 922 RICHTER, D.D., D.W. JOHNSON, D.E. TODD, 1983. Atmospheric sulfur deposition, neutralization, and ion leaching in two deciduous forest ecosystems. J. Environ. Qual. 12(2): p. 263 - 270.
- 1528 RIGGAN, P.J., R.N. LOCKWOOD, E.N. LOPEZ, 1985. Deposition and processing of airborne nitrogen pollutants in mediterranean-type ecosystems of southern California, USA. Environ. Sci. Technol. 19(9): p. 781 - 789.
- 1624 ROBERGE, J., A.P. PLAMONDON, J. STEIN, 1984. Analyse de l'écoulement de l'eau de fonte sur le versant nord du lac Laflamme à partir des données journalières de 1981 et 1982. Environnement Canada, Direction des eaux intérieures, Région du Québec. 51 p.
- 691 ROSENQVIST, I.T., 1978. Acid precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment 10(3): p. 271 - 272.
- 436 ROSENQVIST, I.T., 1978. Alternative Sources for Acidification of River Water in Norway. The Science of the Total Environment, 10: p. 39 - 49.
- 1568 ROSENQVIST, I.T., P. JORGENSEN, H. RUESLATTEN, 1980. The importance of natural H<sup>+</sup> production for acidity in soil and water. In: Ecological impact of acid precipitation. Proceeding of an international conference. Sandefjord, Norway, March 11-14, 1980. D. Drablos and A. Tollan (eds.). p. 240 - 241.
- 619 RUBEC, C.D.A., 1981. Les caractéristiques des écosystèmes terrestres par les précipitations acides au Canada. Document de travail no 19. Environnement Canada, Direction générale des terres. 32 p.
- 1348 RUTHERFORD, G.K., G.W. VANLOON, S.F. MORTENSEN, J.A. HERN, 1985. Chemical and pedogenetic effects of simulated acid precipitation on two eastern canadian forest soils. II. Metals. Can. J. For. Res. 15(5): p. 848 - 854.

(section 3. 6)

- 1531 SALIM, R., J.W. ROBINSON, 1985. Removal of dissolved aluminum released by acid rain using decaying leaves. II. Effects of concentration of leaves, aluminum and other cations. J. Environ. Sci. Health Part A Environ. Sci. Eng. 20(6): p. 721 - 734.
- 168 SCHEIDER, W.A., D.S. JEFFRIES, P.J. DILLON, 1979. Effects of Acidic Precipitation on Precambrian Freshwaters in Southern Ontario. Journal of great Lakes Research 5 (1): p. 45 - 51.
- 444 SEIP, H.M., A. TOLLAN, 1978. Acid Precipitation and other possible sources for acidification of rivers and lakes. The Science of the Total Environment, 10: p. 253 - 270.
- 289 SEIP, H.M., G. ABRAHAMSEN, E.T. GJESSING, A. STUANES, 1979. Studies of soil-, precipitation - and run-off chemistry in six small natural plots ("mini-catchments"). SNSF-Project Rapport IR 46/76, Oslo. 62 p.
- 618 SHRINER, D.S., 1980. Terrestrial vegetation air pollutant interactions: nongaseous pollutants, wet deposition. Proceedings of International Conference on air pollutants and their effects on terrestrial ecosystems. Banff, Alberta, May 10-17. 30 p.
- 1541 SOVERI, J., 1985. Influence of meltwater on the amount and composition of groundwater in quaternary deposits in Finland. Vesientutkimuslaitoksen Julk. 63: 92 p.
- 457 SPOSITO G., A.L. PAGE, M.E. FRINK, 1980. Effects of Acid Precipitation on Soil Leachate Quality: Computer Calculations. EPA-600/3 80-015, Corvallis Environmental Research Laboratory. 38 p.
- 1572 STEINNES, E., 1984. Heavy metal pollution of natural surface soils due to long-distance atmospheric transport. In: Pollutants in porous media. Springer-Verlag, New-York. B.Yaron, G.Dagan, J.Goldshmid (eds.). p. 115 - 122.
- 64 STRAYER, R.F., C.J. LIN, M. ALEXANDER. 1981. Effect of simulated acid rain on nitrification and nitrogen mineralization in forest soils. J. Environ. Qual., 10(4): p. 547 - 551.

(section 3. 6)

- 636 STRAYER, R.F., M. ALEXANDER, 1981. Effects of simulated acid rain on glucose mineralization and some physicochemical properties of forest soils. Journal of Environmental Quality, 10(4): p. 460 - 465.
- 1174 STREET, J.J., A.M.O. ELWALI, 1983. Fluorite solubility in limed acid sandy soils. Soil Sci. Soc. Am. J. 47(3): p. 483 - 485.
- 94 SYLVESTRE, A., 1981. Interprétation des données physico-chimiques de 24 lacs du Sud du Québec étudiés dans le cadre du programme des précipitations acides du Service canadien de la faune. Environnement Canada, Service canadien de la faune, Région du Québec. 110 p.
- 1291 TABATABAI, M.A., 1985. Effect of acid rain on soils. Critical Reviews in Environmental Control 15(1): p. 65 - 110.
- 869 TARES, T., 1982. The acidification of soil and leaching of nutrients by acid precipitation. Luonnon Tutkija, 86(1): p. 33 - 38. (En finnois avec résumé en anglais)
- 496 THOMPSON, M.E., F.C. ELDER, A.R. DAVIS, S. WHITLOW, 1980. Evidence of Acidification of Rivers of Eastern Canada. National Water Research Institute, Burlington, Ontario.
- 851 THORNTON, J.D., S.J. EISENREICH, 1982. Impact of land-use on the acid and trace element composition of precipitation in the north central U.S. Atmospheric Environment 16(8): p. 1945 - 1955.
- 494 TOMLINSON, G.H., 1981. Acid Rain and the Forest - The Effect of Aluminum and the German Experience. Domtar, Centre de recherche Senneville, Québec, projet no. 74-7124-13: 22 p.
- 1233 TOMLINSON II, G.H., 1983. Air pollutants and forest decline. Environ. Sci. Technol. 17(6): p. 246A - 256A.
- 1549 TURNER, R.S., A.H. JOHNSON, D. WANG, 1985. Biogeochemistry of aluminum in McDonald Branch watershed, New-Jersey, USA, pine barrens. J. Environ. Qual. 14(3): p. 314 - 323.
- 809 ULRICH, B., 1981. Theoretical consideration of the ion cycle in forest ecosystems. Zeitschrift für Pflanzenernährung und Bodenkunde, 144(6): p. 647 - 659. (En allemand, avec résumé en anglais).

(section 3. 6)

- 1059 VAN BREEMEN, N., C.T. DRISCOLL, J. MULDER, 1984. Acidic deposition and internal proton sources in acidification of soils and waters. Nature 307(5952): p. 599 - 604.
- 810 VAN BREEMEN, N., ET AL., 1982. Soil acidification from atmospheric ammonium sulphate in forest canopy throughfall. Nature, 299: p. 548 - 550.
- 1279 VAN LOON, G.W., 1983. Acid rain and soil. Can. J. Physiol. Pharmacol. 62(8): p. 991 - 997.
- 1553 VESELY, J., V. DUBANEK, 1985. Influence of the geological composition of the basement on pH and specific conductivity of surface water. Vestn. Ustred. Ustavu Geol. 60(5): p. 267 - 276.
- 734 WAINWRIGHT, M., S. SUPHARUNGSUN, K. KILLHAM, 1982. Effect of acid rain on the solubility of heavy metal oxides and fluorspar (CaF<sub>2</sub>) added to soil. The Science of the Total Environment 23-34: p. 85 - 90.
- 166 WHITBY, L.M., P.M. STOKES, T.C. HUTCHINSON, G. MYSLIK, 1976. Ecological Consequence of Acidic and Heavy-Metal Discharges from the Sudbury Smelters. Canadian Mineralogist 14: p. 47 - 57.
- 18 WIKLANDER, L., 1978. Leaching and Acidification of Soils. EPRI/CERL Workshop on effects of acid precipitation, Scotland, 4 - 7 sept. 1978. p. 5 - 7.
- 802 WOLT, J.D., D.A. LIETZKE, 1982. The influence of anthropogenic sulfur inputs upon soil properties in the Copper Basin, region of Tennessee. Journal of the American Soil Science Society, 46: p. 651 - 656.
- 1384 WOOD, J.M., 1985. Effects of acidification on the mobility of metals and metalloids; an overview. Environ. Health Perspect. 63: p. 115 - 120.
- 199 WOOD, T., F.H. BORMANN, 1977. Short-Term Effects of A Simulated Acid Rain upon the Growth and Nutrient Relations of Pinus Strobus, L. Water, Air and Soil Pollution 7: p. 479 - 488.
- 304 WRIGHT, R.F., C. LYSHOLM, 1975. Regional survey of lakes in southern Norway, fall 1974. Preliminary analysis of waterchemistry data, SNSF Project, Rapport IR 6/75, Oslo. 24 p.

(section 3. 6)

- 296 WRIGHT, R.F., T. DALE, A. HENRIKSEN, G.R. HENDREY, E.T. GJESSING, M. JOHANNESSEN, C. LYSHOLM, E. STOREN, 1977. Regional Surveys of small Norwegian lakes October 1974, March 1975, March 1976, and March 1977. SNSF-Project, IR 33/77, Oslo. 467 p.
- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.

### 3. 7 Méthodes et techniques

- 241 ADAMSKI, J.M., M.F.P. MICHALSKI, 1975. Reclamation of acidified lakes Middle and Lohi, Sudbury, Ontario. Verhandlungen, Internationale Vereinigung fur Theoretische und Angewandte limnology 19: p. 1971 - 1983.
- 1418 ANDELMAN, J.B., J.R. MILLER. 1986. Les effets des précipitations acides sur les composés d'aluminium dans les cours d'eau. Bulletin de la Qualité des Eaux, Environnement Canada, 11(1): p. 21 - 27.
- 927 ARP, P.A., 1983. Modelling the effects of acid precipitation on soil leachates: a simple approach. Ecological Modelling, 19(2): p. 105 - 117.
- 714 ARP, P.A., S. RAMNARINE, 1982. Modelling and verifying the effects of acid precipitation on soil leachates: a simple approach. In: Comptes rendus du symposium canadien d'hydrologie 1982. Procédés hydrologiques des régions boisées, Fredericton, 14-15 juin 1982, p. 615 - 635.
- 926 ARP, P.A., S. RAMNARINE, 1983. Verifying the effect of acid precipitation on soil leachates: a comparison between published records and model predictions. Ecological Modelling 19(2): p. 119 - 138.
- 1254 ASPILA, K.I., 1983. Guidelines for in lab quality control for LRTAP projects. A report of the Ad-Hoc Work Group on Quality Control to the LRTAP Quality Assurance and Methods Subgroup of the Federal-Provincial Research Monitoring and Co-ordinating Committee. 30 p.
- 1255 ASPILA, K.I., S. TODD, 1984. LRTAP intercomparison study L 4: major ions, nutrients and physical properties in water. Analytical Methods Division, National Water Research Institute, Burlington. 47 p.
- 388 BARTON, P., T. VATANATHAM, 1976. Kinetics of Limestone Neutralization of Acid Waters. Environmental Science and Technology, 10(3): p. 262 - 266.
- 259 BEAMISH, R.J., 1974. Loss of Fish Populations from Unexploited Remote Lakes in Ontario, Canada as a Consequence of Atmospheric Fallout of Acid. Water Research 8: p. 85 - 95.

(section 3. 7)

- 170 BENGTTSSON, B., W. DICKSON, 1980. Liming Acid Lakes in Sweden. *Ambio* 9 (1): p. 34 - 36.
- 1599 BERGSTROM, S., B. CARLSSON, G. SANDBERG, 1985. Integrated modelling of runoff, alkalinity, and pH on a daily basis. *Nordic Hydrology* 16: p. 89 - 104.
- 901 BJERLE, I., G. ROCHELLE, H. SVERDRUP, 1982. Limestone dissolution in acid lakes. *Vatten*, 38(2): p. 156 - 163.
- 573 BLAKE, L.M. 1981. Liming acid ponds in New-York. *New-Yord Fish and Game Journal*, 28(2): p. 208 - 214.
- 1431 BLOOM, P.R., D.F. GRIGAL, 1985. Modelling soil response to acidic deposition in nonsulfate adsorbing soils. *J. Environ. Qual.* 14(4): p. 489 - 495.
- 954 BOBEE, B., M. LACHANCE, 1983. A method for analyzing data on lake acidification and its application in Quebec, Canada. *Water Qual. Bull.* 8(3): p. 160 - 167.
- 987 BOBEE, B., M. LACHANCE, J. HAEMMERLI, A. TESSIER, J.-Y. CHARETTE, J. KRAMER, 1983. Evaluation de la sensibilité à l'acidification des lacs du sud du Québec et incidences sur le réseau d'acquisition de données. *Environnement Canada, Direction générale des eaux intérieures, région du Québec*. 203 p.
- 982 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. The nature and extent of acidification in Quebec Lakes. INRS-Eau, scientific report no 140 for the Ministère de l'Environnement du Québec, Service de la qualité des eaux. 210 p.
- 128 BOBEE, B., Y. GRIMARD, M. LACHANCE, A. TESSIER, 1982. Nature et étendue de l'acidification des lacs du Québec. INRS-Eau, rapport scientifique no 140, pour le ministère de l'Environnement du Québec, Service de la qualité des eaux. 243 p.
- 473 BOOTY, W., 1980. Watershed Acidification Model. In: *Environmental Geochemistry Report*, McMaster University: 35 p.
- 971 BOOTY, W.G., 1983. Watershed acidification model and the soil acid neutralization capacity concept. Ph. D. Thesis, McMaster University, Hamilton, Ont. 194 p.

(section 3. 7)

- 1193 BREITLAUCH, K-S., C.-Y. CHENG, 1982. Turbidimetric determination of sulfates in aqueous samples. Proceedings of the Pennsylvania Academy of Science 56(2): p. 184 - 186.
- 1009 BROSSET, C., 1983. Characterization of Acidity in natural waters. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 44 - 55.
- 702 BROUARD, D., M. LACHANCE, G. SHOONER, R. VAN COILLIE, 1982. Sensibilité à l'acidification de quatre rivières à saumons de la Côte-Nord du Saint-Laurent (Québec). Can. Tech. Rep. Fish. Aquat. Sci. 1109F. 56 p.
- 723 CAMPBELL, P.G.C., M. BISSON, J. BOISVERT, R. BOUGIE, A. TESSIER, J.P. VILLENEUVE, 1982. Méthodologie analytique pour déterminer la spéciation de l'aluminium dans les eaux lacustres en voie d'acidification. INRS-Eau, rapport scientifique no 145 et Environnement Canada, Direction générale des eaux intérieures, région du Québec. 113 p.
- 960 CAMPBELL, P.G.C., M. BISSON, R. BOUGIE, A. TESSIER, J.P. VILLENEUVE, 1983. Speciation of aluminum in acidic freshwaters. Anal. Chem. 55(14): p. 2246 - 2252.
- 959 CAMPBELL, P.G.C., R. BOUGIE, A. TESSIER, J.P. VILLENEUVE, 1983. Aluminum speciation in surface waters on the canadian precambrian shield. Presented at the XX11 nd Congress of the International Association of Theoretical and Applied Limnology, Lyon. 12 p.
- 727 CANADA. ENVIRONNEMENT CANADA, 1982. Arguments pour la délimitation de l'étendue du réseau TADPA pour les eaux de surface. Direction générale des eaux intérieures, région du Québec. 12 p.
- 1028 CARON, F., 1983. Détermination, à l'aide des isotopes stables du soufre, de la proportion des sulfates des lacs qui provient des précipitations. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 23 p.

(section 3. 7)

- 1600 CARON, F., 1984. Evaluation, à l'aide des mesures des rapports des isotopes stables du soufre et de l'oxygène, de la proportion des sulfates mesurés dans les lacs attribuable aux dépôts atmosphériques. Université du Québec, Institut National de la Recherche Scientifique, Mémoire de maîtrise. 100 p.
- 694 CHEN, C.W., M. ASCE, J.D. DEAN, S.A. GHERINI, R.A. GOLDSTEIN, 1982. Acid rain model: Hydrologic module. J. Environ. Eng. Div. (Proc. Am. Soc. Civ. Eng.) 108(E3): p. 455 - 472.
- 1570 CHEN, C.W., S.A. GHERINI, J.D. DEAN, R.J.M. HUDSON, R.A. GOLDSTEIN, 1984. Development and calibration of the integrated lake-watershed acidification study model. In: Modeling of total acid precipitation impacts. Acid precipitation series. John I. Teasley ed. Butterworth Publishers, Toronto. p. 175 - 203.
- 920 CHRISTOPHERSEN, N., H.M. SEIP, R.F. WRIGHT, 1982. A model for streamwater chemistry at Birkenes, Norway. Water Resources Research 18(4): p. 977 - 996.
- 145 CHRISTOPHERSEN, N., R.F. WRIGHT, 1981. Sulfate Budget and a Model for Sulfate Concentrations in Stream Water at Birkenes, a Small Forested Catchment in Southernmost Norway. Water Resources Research 17(2): p. 377 - 389.
- 1139 CHURCH, M.R., J.N. GALLOWAY, 1984. Application of Henriksen's "acidification indicator" and "predictor nomograph" to two Adirondack lakes. Water, Air, and Soil Pollution 22(2): p. 111 - 120.
- 1187 CLAIR, T.A., 1984. Aluminum speciation in waters of Nova Scotia and their impact on Water Quality Branch analytical and field methods. IWD-AR-WQB-84-69, Environment Canada, Inland Waters Directorate, Moncton, N.B. 28 p.
- 137 CLAIR, T.A., J.P. WITTEMAN, S.H. WHITLOW, 1982. Acid Precipitation Sensitivity of Canada's Atlantic Provinces. Inland Waters Directorate Technical Bulletin no 124, Environment Canada, Ottawa. 23 p.
- 73 CONROY, N., D.S. JEFFRIES, J.R. KRAMER, 1974. Acid Shield Lakes in the Sudbury Ontario Region. Water Pollution Research in Canada Proc. 9th Canadian Symp. 9: p. 45 - 61.

(section 3. 7)

- 1399 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.E. WRIGHT, 1985. Time scales of catchment acidification. A quantitative model for estimating freshwater acidification. Environ. Sci. Technol. 19(12): p. 1144 - 1149.
- 1336 COSBY, B.J., G.M. HORNBERGER, J.N. GALLOWAY, R.F. WRIGHT, 1985. Modeling the effects of acid deposition: Assessment of a lumped parameter model of soil water and stream chemistry. Water Resour. Res. 21(1): p. 51 - 63.
- 1612 COURCHESNE, F., W. HENDERSHOT, 1987. Potentiel d'adsorption et de désorption des sulfates dans les horizons supérieurs du sol au Bassin du Lac Laflamme. Environnement Canada, Direction des eaux intérieures, Région du Québec. 35 p.
- 1563 DAHL, J.B., C. QVENILD, O. TOLLAN, N. CHRISTOPHERSEN, H.M. SEIP, 1980. Use of radioactive tracers to study runoff and soil-water interactions in natural mini-catchments. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, (eds.). Sandefjord, Norway, March 11-14, 1980. p. 160 - 161.
- 679 DePINTO, J.V., R.F. GUMINIAC, R.S. HOWELL, J.K. EDZWALD, 1980. Use of microcosms to evaluate acid lake recovery techniques. Giesy, J.P. (ed). DOE Symposium Series, Vol. 52. Microcosms in Ecological Research; Papers from a Symposium, Augusta, U.S.A. Nov. 8-10, 1978. p. 562 - 582.
- 1613 DESCHENES, J., J.P. VILLENEUVE, 1985. Modeling the hydrologic cycle: The MC model. Nordic Hydrology 16: p. 273 - 290.
- 758 DESILETS, L., 1982. Elaboration d'une méthodologie d'évaluation de l'acidification en milieu lacustre au Québec. Essai présenté à l'Ecole des gradués de l'Université Laval. 128 p.
- 405 DICKSON, W. 1978. Some effects of the acidification of Swedish lakes. International association of theoretical & applied limnology, 20: p. 851 - 856.
- 1457 FAUST, S.D., R. SCHMIDT, 1985. Geochemical control of hydrogen ion in lakes receiving acidic deposition. J. Environ. Sci. Health part A. Environ. Sci. Eng. 20(6): p. 599 - 616.

(section 3. 7)

- 1571 FONTAINE III, T.D., 1984. A non-equilibrium approach to modeling metal speciation in acid, aquatic systems: theory and process equations. Ecological Modelling, 21: p. 287 - 313.
- 1041 GALLOWAY, J.N., S.A. NORTON, M.R. CHURCH, 1983. Freshwater acidification from atmospheric deposition of sulfuric acid: A conceptual model. Environ. Sci. Technol. 17(11): p. 541A - 545A.
- 1362 GHERINI, S.A., L. MOK, R.J.M. HUDSON, G.F. DAVIS, C.W. CHEN, R.A. GOLDSTEIN, 1985. The ILWAS model; formulation and application. Water Air Soil Pollut. 26(4): p. 425 - 460.
- 1363 GOLSTEIN, R.A., C.W. CHEN, S.A. GHERINI, 1985. Integrated lake-watershed acidification study; summary. Water Air Soil Pollut. 26(4): p. 327 - 338.
- 410 GRAHN, O., H. HULTBERG, 1975. The Neutralizing capacity of 12 different lime products used for pH - adjustment of acid water. Vatten, 2: p. 120 - 132.
- 726 HAEMMERLI, J., 1982. Rationalisation du réseau de qualité des eaux de surface (TADPA), Répartition spatiale des paramètres de qualité. Document de travail. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 54 p.
- 961 HAEMMERLI, J., 1983. Principales caractéristiques du réseau TADPA de qualité des eaux de surface - volet québécois. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 9 p.
- 575 HAGVAR, S., T. AMUNDSEN. 1981. Effects of liming and artificial acid rain on the mite (Acari) fauna in coniferous forest. Oikos, 37(1): p. 7 - 20.
- 1127 HAINES, T.A., J. AKIELASZEK, 1983. A regional survey of the chemistry of headwater lakes and streams in New England: Vulnerability to acidification. Report for: Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. FWS/OBS-80/40.15; PB84-103357. 141 p.
- 1467 HARI, P., T. RAUNEMAA, A. HAUTOJARVI, 1986. The effects of forest growth of air pollution from energy production. Atmospheric Environment 20(1): p. 129 - 138.

(section 3. 7)

- 1 HENRIKSEN, A., 1979. A simple Approach for Identifying and Measuring Acidification of Freshwater. Nature, April 1979. 278 p.
- 498 HENRIKSEN, A., 1980. Acidification of Freshwaters - A Large Scale Titration. Norwegian Institute for Water Research, Norway. 27 p.
- 816 HENRIKSEN, A., 1982. Alkalinity and acid precipitation research. Vatten, 38(1): p. 83 - 85.
- 1470 HENRIKSON, L., H.G. OSCARSON, J.A.E. STENSON, 1984. Development of the crustacean zooplankton community after lime treatment of the fishless lake Gardsjon, Sweden. Inst. Freshwater Res. Drottningholm Rep. 61: p. 104 - 114.
- 1297 HERCZEG, A.L., R.H. HESSLEIN, 1984. Determination of hydrogen ion concentration in softwater lakes using carbon dioxide equilibria. Geochimica et Cosmochimica Acta 48(4): p. 837 - 845.
- 421 HERRICKS, E.E., J. CAIRNS Jr, 1977. The Effects of Lime Neutralization of Acid Mine Drainage on Stream Ecology. 32nd Industrial Waste Conference, Purdue Univ. p. 477 - 486.
- 463 HESSLEIN, R.H., 1979. Lake Acidification Potential in the Alberta Oil Sands Environmental Research Program Study Area. Alberta Oil Sands Environmental Research Program, 26 p.
- 1327 HOLCOMBE, G.W., G.L. PHIPPS, J.W. MARIER, 1984. Methods for conducting snail (Aplexa hypnorum) embryo through adult exposures: effects of cadmium and reduced pH levels. Arch. Environ. Contam. Toxicol. 13(5): p. 627 - 634.
- 1474 HOWELLS, G.D., 1985. Mechanisms and causes of fishery decline. U.S. Fish. Wildl. Serv. Biol. Rep. 8040(21): p. 62 - 81.
- 1163 HULTBERG, H., 1983. Liming of acid-stressed ecosystems: Induced chemical and biological effects. VDI-Berichte 500: p. 409 - 414.
- 206 HULTBERG, H., S. JOHANSSON, 1981. Acid Groundwater. Nordic Hydrology 12(1): p. 51 - 64.

(section 3. 7)

- 1573 JACKS, G., G. KNUTSSON, L. MAXE, A. FYLKNER, 1984. Effect of acid rain on soil and groundwater in Sweden. In: Pollutants in porous media. Springer-Verlag, New-York. B.Yaron, G.Dagan, J.Goldshmid eds. p. 94 - 114.
- 1366 JOHANNES, A.E., E.R. ALTWICKER, N.L. CLESCERI, 1985. The integrated lake-watershed acidification study; atmospheric inputs. Water Air Soil Pollut. 26(4): p. 339 - 354.
- 140 JOHNSON, D.W., 1981. The natural acidity of some unpolluted waters in southeastern Alaska and potential impacts of acid rain. Water, Air and Soil Pollution 16(2): p. 243 - 252.
- 1480 JOHNSON, M.G., 1985. Acidification of Georgian Bay rivers estimated by modification of the Wright-Henriksen model. J. Great Lakes Res. 11(2): p. 163 - 170.
- 1611 JONES, H.G., 1987. Chemical dynamics of snowcover and snowmelt in a boreal forest. In: Seasonal snowcovers - physics, chemistry, hydrology. D. Reidel Publishing Company, H.G. Jones and W.J. Orville-Thomas (eds.). p. 531 - 574.
- 1329 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1985. Aspect qualitatif du développement au bassin du lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1984. INRS-EAU, rapport scientifique no. 182. 42 p.
- 1621 JONES, H.G., W. SOCHANSKA, J.-Y. CHARETTE, J. STEIN, 1986. Aspects qualitatif du développement au bassin du lac Laflamme d'un modèle prédictif de l'impact des précipitations acides - phase de la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 142 p.
- 973 JONES, M., D. MARMOREK, M. STALEY, 1982. Acidic precipitation in eastern Canada: an application of adaptive management to the problem of assessing and predicting impacts on an extensive basis. Department of Fisheries and Oceans, Great lakes Biolimnology Laboratory, Sault Ste-Marie and Burlington, Ontario. 145 p.
- 1392 KAMARI, J., 1985. Quantitative assessment of lake acidification in Finland. Aqua Fenn. 15(1): p. 11 - 20.

(section 3. 7)

- 107 KAPLAN, E., H.C. THODE JR., A. PROTAS, 1981. Rocks, Soils, and Water Quality. Relationships and Implications for Effects of Acid Precipitation on Surface Water in the Northeastern United States. Environ. Sci. Technol. 15(5): p. 539 - 544.
- 532 KEREKES, J. G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1981. The Response of three Lake Basins to Acid Precipitation in Central Nova Scotia between June, 1979, and May, 1980. Environment Canada, Canadian Wildlife Service, Halifax, N.S. 14 p.
- 1117 KEREKES, J., G. HOWELL, S. BEAUCHAMP, T. POLLOCK, 1982. Characterization of three lake basins sensitive to acid precipitation in central Nova Scotia (June 1979 to may 1980). Int. Revue ges. Hydrobiol. 67(5): p. 679 - 694.
- 1609 KEREKES, J., G. HOWELL, T. POLLOCK, 1983. Problems associated with sulphate determination in colored, humic waters in Kejimikujik National Park, Nova Scotia (Canada). Verh. Internat. Verein. Limnol. 12: 16 p.
- 1608 KEREKES, J., T. POLLOCK, 1983. Comment on the interpretation of the sulphate ions in Watt et al., 1983, Evidence of acidification on some Nova Scotia rivers and its impact on Atlantic salmon, Salmo salar. Can. J. Fish. Aquat. Sci. 40:462-473. Can. J. Fish. Aquat. Sci. 40(12): 5 p.
- 688 KRAMER, J., A. TESSIER, 1982. Acidification of aquatic systems: a critique of chemical approaches. Dept. of Geology, Mc Master University, Ont. 30 p.
- 493 KRAMER, J.R., 1981. Calcite Saturation Index, Alkalinity and Alkalinity Corrections to Previous Data. Environmental Geochemistry Report. McMaster University, Department of Geology. 7 p.
- 1131 KRAMER, J.R., 1983. Aluminum speciation and analysis. McMaster University, Department of Geology, Hamilton, Ont. 48 p.
- 1133 KRAMER, J.R., 1984. Modified gran analysis for acid and base titrations. McMaster University, Department of Geology, Hamilton, Ont. No. 1984/2, 33 p.
- 320 KRAMER, J.R., 1976. Geochemical and lithological factors in acid precipitation. USDA Forest Service Gen. Tech. Rep NE-23: p. 611 - 618.

(section 3. 7)

- 1265 KRAUSE-DELLIN, D., C. STEINBERG, 1984. Evidence of lake acidification by a novel biological pH-meter. Environmental Technology Letters 5(9): p. 403 - 406.
- 1601 LAM, D.C.L., A.G. BOBBA, 1985. Modelling watershed runoffs and basin acidification. National Water Research Institute, Burlington, Ontario. 12 p.
- 835 LEGRAND, M.R., A.J. ARISTARAIN, R.J. DELMAS, 1982. Acid titration of polar snow. Analytical Chemistry 54(8): p. 1336 - 1339.
- 1491 LINDSTROM, T., W. DICKSON, G. ANDERSSON, 1984. Reclaiming acid high mountain lakes by liming; a progress report. Inst. Freshwater Res. Drottningholm Rep. 61: p. 128 - 137.
- 1494 MACHELL, J.R., J.F. WILTSHIRE, D. WALTER, R. DONALD, 1985. A study of acidification in seven lakes in Mainland, Nova Scotia, 1979-1981. Canada, Environment Canada, Environment Protection Service, EPS-5-AR-85-1. 107 p.
- 725 MAGNAN, P., 1982. Etude de la sensibilité aux précipitations acides de 22 lacs du Parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 44 p.
- 433 MICHALSKI, M.F.P., J. ADAMSKI, 1974. Restoration of Acidified Lakes, Middle and Lohi in the Sudbury Area. In: Ontario Industrial Wastes Conferences: p. 163 - 175.
- 1148 NORTON, S.A., A. HENRIKSEN, 1983. The importance of CO2 in evaluation of effects of acidic deposition. Vatten 39(4): p. 346 - 354.
- 1225 NRIAGU, J.O., J.F. GAILLARD, 1984. The speciation of pollutant metals in lakes near the smelters at Sudbury, Ontario. In: Environmental impacts of Smelters (Advances in environmental science and technology, V. 15). J. Nriagu (ed.). p. 349 - 374.
- 1079 OHMAN, L.-O., S. SJOBERG, 1983. Equilibrium and structural studies of silicon (IV) and aluminium (III) in aqueous solution - 10. A potentiometric study of aluminium (III) pyro-catecholates and aluminium (III) hydroxo-pyrocatecholates in 0.6 M Na (Cl). Polyhedron 2(12): p. 1329 - 1335.

(section 3. 7)

- 1232 OKLAND, K.A. J.G.J. KUIPER, 1982. Distribution of small mussels (Sphaeriidae) in Norway, with notes on their ecology. Malacologia 22(1-2): p. 469 - 477.
- 1185 OLIVER, B.G., E.M. THURMAN, R.L. MALCOLM, 1983. The contribution of humic substances to the acidity of colored natural waters. Geochimica et Cosmochimica Acta 47(11): p. 2031 - 2035.
- 52 ONTARIO. MINISTRY OF THE ENVIRONMENT. 1979. Determination of the susceptibility to acidification of poorly buffered surface waters. Limnology and Toxicity Section, Water Resources Branch. 21 p.
- 428 PEARSON, F.H., A.J. McDONNELL, 1975. Limestone Barriers to Neutralize Acidic Streams. Journal of the Environmental Engineering Division, 101(EE3): p. 425 - 441.
- 429 PEARSON, F.H., A.J. McDONNELL, 1975. Use of Crushed Limestone to Neutralize Acid Wastes. Journal of the Environmental Engineering Division, 101(EE1): p. 139 - 158.
- 1408 PLANKEY, B.J., H.H. PATTERSON, C.S. CRONAN, 1986. Kinetics of aluminum fluoride complexation in acidic waters. Environ. Sci. Technol. 20(2): p. 160 - 165.
- 555 POWELL, J.J., 1976. Preliminary report on the effects of neutralization on the fish community of Nelson lake, near Sudbury, Ontario. Ministry of Natural Resources, Fish and Wildlife Branch, Sudbury, Ontario. 38 p.
- 1130 PULFER, K., J.R. KRAMER, 1983. Aluminum hydrolysis and organic speciation review. McMaster University, Department of Geology, Hamilton, Ont. 51 p.
- 1275 RENEZ, A.N., K.E. PERCY, I.M. KETTLES, 1985. Predicting terrain sensitivity to acid rain: scientists integrate data sets. Geos 1985/1: p. 21 - 25.
- 1188 REUSS, J.O., 1983. Implications of the calcium - aluminum exchange system for the effect of acid precipitation on soils. J. Environ. Qual. 12(4): p. 591 - 595.

(section 3. 7)

- 1624 ROBERGE, J., A.P. PLAMONDON, J. STEIN, 1984. Analyse de l'écoulement de l'eau de fonte sur le versant nord du Lac Laflamme à partir des données journalières de 1981 et 1982. Environnement Canada, Direction des eaux intérieures, Région du Québec. 51 p.
- 1625 ROBERGE, J., J. STEIN, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1984. Environnement Canada, Direction des eaux intérieures, Région du Québec. 34 p.
- 163 RODHE, W., 1981. Reviving Acidified Lakes. Ambio 10(4): p. 195 - 196.
- 1409 ROGERBERG, E.J.S., A. HENRIKSEN, 1985. An automatic method for fractionation and determination of aluminum species in freshwater. Vatten 41(1): p. 48 - 53.
- 315 SCHEIDER, W., J. ADAMSKI, M. PAYLOR, 1975. Reclamation of Acidified Lakes near Sudbury, Ontario. Ontario Ministry of the Environment. 129 p.
- 422 SCHEIDER, W., P.J. DILLON, 1976. Neutralization and fertilization of Acidified lakes near Sudbury, Ontario. Proc. 11th Canadian Symp. Water Poll. Research Canada, 11: p. 93 - 100.
- 1533 SCHINDLER, D.W., K.H. MILLS, D.F. MALLEY, D.L. FINDLAY, J.A. SHEARER, I.J. DAVIES, M.A. TURNER, G.A. LINSEY, D.R. CRUIKSHANK, 1985. Long-term ecosystem stress; the effects of years of experimental acidification on a small lake. Science (Wash. D.C.) 228(4706): p. 1395 - 1401.
- 1389 SCHINDLER, D.W., M.A. TURNER, R.H. HESSLEIN, 1985. Acidification and alkalization of lakes by experimental addition of nitrogen compounds. Biogeochemistry 1(2): p. 117 - 133.
- 1534 SCHNOOR, J.L., W.D. PALMER, G.E. GLASS, 1985. Modelling impacts of acid precipitation for northeastern Minnesota. EPA (Enviro. Prot. Agency), Rep no. EPA/600/D-85/035, order no. PB85-170181/GAR. 42 p.
- 1379 SCHOFIELD, C.L., J.N. GALLOWAY, G.R. HENDRY, 1985. Surface water chemistry in the ILWAS study basins. Water Air Soil Pollut. 26(4): p. 403 - 424.

(section 3. 7)

- 1149 SEIP, H.M., S. RUSTAD, 1984. Variations in surface water pH with changes in sulphur deposition. Water, Air, and Soil Pollution 21(1-4): p. 217 - 223.
- 1326 SEKERKA, I., J.F. LECHNER, 1984. Determination of alkalinity and acidity of water by conductometric acid-base titration. J. Assoc. Official Analyt. Chem. 67(5): p. 893 - 895.
- 148 SKARTVEIT, A., 1981. Relationships between Precipitation Chemistry, Hydrology, and Runoff Acidity. Nordic Hydrology, 12(2): p. 65 - 80.
- 457 SPOSITO G., A.L. PAGE, M.E. FRINK, 1980. Effects of Acid Precipitation on Soil Leachate Quality: Computer Calculations. EPA-600/3 80-015, Corvallis Environmental Research Laboratory. 38 p.
- 1623 STEIN, J., J. ROBERGE, 1985. Modélisation mathématique du couvert neigeux à l'aide du simulateur hydrologique d'Anderson 1973 pour la fonte printanière de 1985. Environnement Canada, Direction des eaux intérieures, Région du Québec. 12 p.
- 1519 STEINBERG, C., H. HARTMANN, 1986. A biological paleoindicator for early lake acidification: Mallomonadacean chrysophyceae scale abundance in sediments. Naturwissenschaften 73(1): p. 37 - 39.
- 1272 STUANES, A.O., 1984. A simple extraction as an indication of soils sensitivity to acid precipitation. Acta Agric. Scand., 34: p. 113 - 127.
- 843 SVERDRUP, H., I. BJERLE, 1982. Dissolution of calcite and other related minerals in acidic aqueous solution in a pH-stat. Vatten 38(1): p. 59 - 73.
- 1414 TAM, S.C., R.J.P. WILLIAMS, 1986. One problem of acid rain aluminum. J. Inorg. Biochem. 26(1): p. 35 - 44.
- 2 THOMPSON, M.E., 1979. Acidic Atmospheric Precipitation: Evaluation of its Impact on Some Canadian Surface Waters. National Water Research Institute. 14 p.
- 497 THOMPSON, M.E., 1980. Acid Rain and Water Chemistry: An Explanation of Henriksen's Empirical Curve. National Water Research Institute, Burlington, Ont.: 3 p.

(section 3. 7)

- 464 THOMPSON, M.E., 1981. The Cation Denudation Rate as a Quantitative Index of Vulnerability of Aquatic Systems to Acid Precipitation. National Water Research Institute, Burlington, Ontario, 12 p.
- 530 THOMPSON, M.E., 1981. The cation denudation rate as a quantitative index of sensitivity of eastern canadian rivers to acidic atmospheric precipitation. National Water Institute, Burlington, Ontario. 20 p.
- 607 THOMPSON, M.E., E.B. BENNETT, 1980. Variations in the Degree of Acidification of River Waters Observed in Atlantic Canada. National Water Research Institute, Burlington, Ontario. 11 p.
- 36 THOMPSON, M.E., M.B. HUTTON. 1981. Selected canadian lakes - cations, sulfate pH, PCO2 relationships. Burlington, National Water Research Institute, 31 p.
- 523 THOMPSON, M.E., M.B. HUTTON. 1982. Sulfate in lakes of eastern Canada: calculated atmospheric loads compared with measured wet deposition. National Water Research Institute, Burlington Ontario. 22 p.
- 716 UNDERWOOD, J.K., H.H. VAUGHAN, J.G. OGDEN III, C.G. MANN, 1982. Acidification of Nova Scotia lakes II: Ionic balances in dilute waters. Nova Scotia Department of the Environment, Halifax. 21 p.
- 1353 WRIGHT, R.F., 1985. Chemistry of lake Hovvatn, Norway, following liming and reacidification. Can. J. Fish. Aquat. Sci. 42(6): p. 1103 - 1113.
- 1074 WRIGHT, R.F., A. HENRIKSEN, 1983. Restoration of Norwegian lakes by reduction in sulphur deposition. Nature 305 (5933): p. 422 - 424.
- 704 ZIMMERMAN, A.P., 1982. Sensitivity to Acidification of Waters of Ontario and Neighboring States II: An Analysis of Data Set Variance and Prediction of Acid Sensitive Lake Areas. Dept. of Zoology, University of Toronto for Ontario Hydro. 109 p.
- 703 ZIMMERMAN, A.P., H.H. HARVEY, 1979. Sensitivity to acidification of waters of Ontario and neighboring states. University of Toronto for Ontario Hydro. 136 p.



#### CHAPITRE 4: VEGETATION TERRESTRE

##### Cote

- 858 ABRAHAMSEN, G., A.O. STUANES, B. TVEITE, 1983. Les polluants atmosphériques aéroportés sur de longues distances et leurs effets sur les forêts en Scandinavie. Bulletin de la Qualité des Eaux VIII(2): p. 89 - 95.
- 298 ABRAHAMSEN, G., K. BJOR, O. TEIGEN, 1976. Field experiments with simulated acid rain in forest ecosystems. SNSF - Project, Rapport 4/76, Oslo. 15 p.
- 154 ABRAHAMSEN, G., K. BJOR, R. HORNTVEDT, B. TVEITE, 1976. Effects of Acid Precipitation on Coniferous Forest. In: Impact of Acid Precipitation on Forest and Freshwater Ecosystems in Norway. Braekke, F. (ed.). Research Report 6/76. p. 37 - 63.
- 303 ABRAHAMSEN, G., R. HORNTVEDT, B. TVEITE, 1975. Impacts of acid precipitation on coniferous forest ecosystems. SNSF-Project, Rapport 2/75, Oslo. 15 p.
- 1320 ADAMS, C.M., T.C. HUTCHINSON, 1984. A comparison of the ability of leaf surfaces of three species to neutralize acidic rain drops. New Phytologist 97(3): p. 463 - 478.
- 1253 AMTHOR, J.S., 1984. Does acid rain directly influence plant growth? Some comments and observations. Environmental Pollution (Series A) 36(1): p. 1 - 6.
- 1052 AMTHOR, J.S., F.H. BORMANN, 1983. Productivity of perennial ryegrass as a function of precipitation acidity. Environmental Pollution (Series A) 32(2): p. 137 - 145.
- 1395 ARNY, C.J., P. PELL, 1986. Ethylene production by potato Solanum-tuberosum, cultivar norland radish Raphanus - sativus, cultivar cherry-belle and soybean glycine-max, cultivar amsoy-71 leaf tissue treated with simulated acid rain. Environ. Exp. Bot. 26(1): p. 9 - 16.
- 311 ASHENDEN, T.W., 1979. The Effects of long-term exposures to SO2 and NO2 Pollution on the Growth of Dactylis Glomerata L. and Poa Pratensis L. Environmental Pollution 18(4): p. 249 - 258.

(section 4)

- 312 ASHENDEN, T.W., 1979. Effects of SO<sub>2</sub> and NO<sub>2</sub> Pollution on Transpiration in Phaseolus Vulgaris L. Environmental Pollution 18(1): p. 45 - 50.
- 198 BAKER, J., D. HOCKING, M. NYBORG, 1977. Acidity of Open and Intercepted Precipitation in Forests and Effects on Forest Soils in Alberta, Canada. Water, Air and Soil Pollution 7: p. 449 - 460.
- 1183 BISESSAR, S., K.T. PALMER, A.L. KUJA, S.N. LINZON, 1984. Influence of simulated acidic rain on bacterial speck of tomato. J. Environ. Qual. 13(1): p. 18 - 22.
- 161 BOSSAVY, J., 1968. Informations sur les dommages causés par la pollution de l'air aux plantes et aux animaux dans les pays européens. In: Air Pollution. Proceedings of the First European Congress on the influence of air pollution on plants and animals, Wageningen, 1969, p. 15 - 25.
- 1182 BREWER, P.F., A.S. HEAGLE, 1983. Interactions between Glomus geosporum and exposure of soybeans to ozone or simulated acid rain in the field. Phytopathology 73(7): p. 1035 - 1040.
- 1435 BURGESS, R.L., 1985. Forest decline and acid deposition quandary for natural resources management. Trans. of the 50th North American Wildlife and Natural resources Conference, March 15-20, 1985: p. 82 - 90.
- 1518 CAMPBELL, C.L., J.P. SINN, R.I. BRUCK, S.B. JR MARTIN, 1985. Effect of simulated acid precipitation on disease dynamics in four pathosystems in the field. Phytopathology 75(11): p. 1277.
- 1113 CARLSON, R.W., 1983. The effects of SO<sub>2</sub> on photosynthesis and leaf resistance at varying concentrations of CO<sub>2</sub>. Environmental Pollution (Series A) 30: p. 309 - 321.
- 1290 CASE, J.W., 1984. Lichen biomonitoring networks in Alberta. Environmental Monitoring and Assessment 4: p. 303 - 313.
- 1178 CHANG, F.H., M. ALEXANDER, 1983. Effects of simulated acid precipitation on growth and nodulation of leguminous plants. Bull. Environ. Contam. Toxicol. 30(4): p. 379 - 387.

(section 4)

- 1397 CHAPPELKA, A.H., B.I. CHEVONE, T.E. BURK, 1985. Yellow-poplar seedling growth response to ozone and simulated acidic rain. *Phytopathology* 75(5): p. 624.
- 1444 CHAPPELKA, A.H., B.I. CHEVONE, T.E. BURK, 1985. Growth response of yellow-poplar *Liriodendron-tulipifera* seedling to ozone sulfur dioxide and simulated acidic precipitation alone and in combination. *Environ. Exp. Bot.* 25(3): p. 233 - 244.
- 756 COHEN, C.J., L.C. GROTHAUS, S.C. PERRIGAN, 1982. Effects of simulated sulfuric and sulfuric-nitric acid rain on crop plants: Results of 1980 Crop Survey. Agricultural Experiment Station Oregon State University, Corvallis, Special report 670. 92 p.
- 130 COWELL, D.W., A.E. LUCAS, C.D.A. RUBEC, 1981. Etablissement d'une échelle de vulnérabilité écologique aux précipitations acides. Etude d'impact. Document de travail no. 10 Direction générale des terres. Environnement Canada. 44 p.
- 120 COWLING, E.B., L.S. DOCHINGER. 1979. Effects of Acid Rain on Crops and Trees. American Society for Civil Engineers. ASCE preprint, NO. 3598: p. 21 - 54.
- 730 COX, R.M., 1982. Determination of the sensitivity of the pollination processes of different forest flora species to simulated acid rain. Institute for Environmental Studies, University of Toronto. 44 p.
- 1155 COX, R.M., 1983. Sensitivity of forest plant reproduction to long range transported air pollutants: In vitro sensitivity of pollen to simulated acid rain. *New Phytol.* 95(2): p. 269 - 276.
- 1398 CRIST, T.O., N.R. WILLIAMS, J.S. AMTHOR, T.G. SICCAM, 1985. The lack of an effect of lead and acidity on leaf decomposition in laboratory microcosms. *Environ. Pollut. Ser. A. Ecol. Biol.* 38(4): p. 295 - 304.
- 1356 CRONAN, C.S., 1985. Biogeochemical influence of vegetation and soils in the ILWAS watersheds. *Water Air Soil Pollut.* 26(4): p. 355 - 372.

(section 4)

- 1635 DARVEAU, M., J.-L. DESGRANGES, Y. MAUFFETTE, 1989. Le dépérissement et les oiseaux nicheurs des érablières au Québec. Conférence présentée au 2ème atelier sur le dépérissement des érablières, Saint-Hyacinthe, Québec, 23 - 24 février 1989. Centre de recherche acéricole. Extrait du cahier des conférences. p. 59 - 65.
- 1637 DESGRANGES, J.-L., 1987. Forest birds as biological indicators of the progression of maple dieback in Quebec. ICBP Technical Publication 6: p. 249 - 257.
- 654 EVANS, L.S., 1979. A plant developmental system to measure the impact of pollutants in rain water. J. Air Pollut. Control Assoc. 29(11): p. 1145 - 1148.
- 1114 EVANS, L.S., 1980. Foliar responses that may determine plant injury by simulated acid rain. In: Polluted Rain. Toribara, T.Y., M.W. Miller, P.E. Morrow (eds.). Plenum Press, New-York. p. 239 - 257.
- 739 EVANS, L.S., 1982. Biological effects of acidity in precipitation on vegetation: A review. Environmental and Experimental Botany 22(2): p. 155 - 169.
- 1260 EVANS, L.S., 1984. Acidic precipitation effects on terrestrial vegetation. Annual review of phytopathology, 22: p. 397 - 420.
- 682 EVANS, L.S., T.M. CURRY, 1979. Differential responses of plant foliage to simulated acid rain. Amer. J. Bot. 66(8): p. 953 - 962.
- 368 EVANS, L.S., T.M. CURRY, K.F. LEWIN, 1981. Responses of leaves of phaseolus Vulgaris L. to simulated acidic rain. New Phytologist 88(3): p. 403 - 420.
- 681 EVANS, L.S., N.F. GMUR, F. DA COSTA, 1977. Leaf surface and histological perturbations of leaves of Phaseolus vulgaris and Helianthus annuus after exposure to simulated acid rain. Amer. J. Bot. 64(7): p. 903 - 913.
- 683 EVANS, L.S., N.F. GMUR, F. DA COSTA, 1978. Foliar response of six clones of hybrid poplar to simulated acid rain. Phytopathology 68: p. 847 - 856.

(section 4)

- 916 EVANS, L.S., N.F. GMUR, D. MANCINI, 1982. Effects of simulated acidic rain on yields of Raphanus sativus, Lactuca sativa, Triticum aestivum and Medicago sativa. Environmental and Experimental Botany 22(4): p. 445 - 453.
- 184 EVANS, L.S., K.F. LEWIN, 1981. Growth, Development and yield responses of pinto beans and soybeans to hydrogen ion concentrations of simulated acidic rain. Environmental and Experimental Botany 21: p. 103 - 113.
- 477 EVANS, L.S., K.F. LEWIN, C.A. CONWAY, M.J. PATTI, 1981. Seed yields (quantity and quality) of field-grown soybeans exposed to simulated acidic rain. The New Phytologist, 89(3): p. 459 - 470.
- 1083 EVANS, L.S., K.F. LEWIN, C.A. CONWAY, M.J. PATTI, 1982. Effects of simulated acid rain on mass and protein and carbohydrate contents of seeds of field-grown soybeans. Proceedings of the 20th Annual Hanford life sciences symposium, Richland, Wash. U.S.A. Oct. 19-23, 1980. p. 256 - 269.
- 824 EVANS, L.S., K.F. LEWIN, E.A. CUNNINGHAM, 1982. Effects of simulated acidic rain on yields of field - grown radishes and garden beets. Agriculture and Environment, 7(3 - 4): p. 285 - 298.
- 680 FERENBAUGH, R.W., 1976. Effects of simulated acid rain on Phaseolus vulgaris L. (fabaceae). Amer. J. Bot. 63(3): p. 283 - 288.
- 1173 FORSLINE, P.L., R.C. MUSSELMAN, W.J. KENDER, R.J. DEE, 1983. Effects of acid rain on apple tree productivity and fruit quality. J. Amer. Soc. Hort. Sci. 108(1): p. 70 - 74.
- 1171 FORSLINE, P.L., R.J. DEE, R.E. MELIOUS, 1983. Growth changes of apple seedlings in response to simulated acid rain. J. Amer. Soc. Hort. Sci. 108(2): p. 202 - 207.
- 952 FOSTER, N.W., J.A. NICOLSON, 1983. Acid precipitation and vegetation interaction in the Turkey Lake forest watershed. Canadian Forestry Service Research Notes, 3(2): p. 6 - 7.

(section 4)

- 724 GAMACHE, D., 1982. Géologie, géomorphologie et végétation forestière de 22 bassins hydrologiques du Parc national de la Mauricie. Direction générale des eaux intérieures, région du Québec. 96 p.
- 1459 GELLINI, R., F. PANTANI, P. GROSSONI, F. BUSSOTTI, E. BARBOLANI, C. RINALLO, 1985. Further investigation on the causes of disorder of the coastal vegetation in the park of San-Rossore, central Italy. Eur. J. For. Pathol. 15(3): p. 145 - 157.
- 136 GILBERT, O.L., 1970. Further Studies on the Effect of Sulphur Dioxide on Lichens and Bryophytes. New Phytologist 69: p. 605 - 627.
- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 38 GORHAM, E., A.G. GORDON, 1960. The Influence of Smelter Fumes Upon the Chemical Composition of Lake Waters Near Sudbury, Ontario, and Upon Surrounding Vegetation. Canadian Journal of Botany 38: p. 477 - 487.
- 310 GRILL, D., H. ESTERBAUER, U. KLOSCH, 1979. Effect of Sulphur Dioxide on Glutathione in Leaves of Plants. Environmental Pollution 19(3): p. 187 - 194.
- 575 HAGVAR, S., T. AMUNDSEN. 1981. Effects of liming and artificial acid rain on the mite (Acari) fauna in coniferous forest. Oikos, 37(1): p. 7 - 20.
- 57 HAINES, B., M. STEFANI, F. HENDRIX, 1980. Acid Rain: Threshold of leaf damage in eight plant species from a southern Appalachian forest succession. Water, Air, and Soil Pollution 14: p. 403 - 407.
- 1467 HARI, P., T. RAUNEMAA, A. HAUTOJARVI, 1986. The effects of forest growth of air pollution from energy production. Atmospheric Environment 20(1): p. 129 - 138.
- 482 HARRIMAN, R., B.R.S. MORRISON. 1981. Forestry, fisheries and acid rain in Scotland. Scottish Forestry, 35(2): p. 89 - 95.

(section 4)

- 652 HARRIMAN, R., B.R.S. MORRISON, 1982. Ecology of streams draining forested and non-forested catchments in an area of central Scotland subject to acid precipitation. Hydrobiologia, 88(3): p. 251 - 263.
- 1403 HART, R., R.H. BIGGS, P.G. WEBB, 1986. Effect of simulated acid rain on growth and yield of valencia orange floradade tomato Lycopersicon-esculentum and slash pine Pinus-elliottii in Florida, USA. Environ. Toxicol. Chem. 5(1): p. 79 - 86.
- 794 HAVAS, M., T.C. HUTCHINSON, 1983. The Smoking Hills: natural acidification of an aquatic ecosystem. Nature, 301(5895): p. 23 - 27.
- 1085 HEAGLE, A.S., R.B. PHILBECK, P.F. BREWER, R.E. FERREL, 1983. Response of soybeans to simulated acid rain in the field. J. Environ. Qual. 12(4): p. 538 - 543.
- 99 HECK, W.W., A.S. HEAGLE, E.B. COWLING, 1977. Air pollution: Impact on plants. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7 - 10, 1977. p. 193 - 203.
- 1469 HENDERSON, A., 1985. Literature on air pollution and lichens XXII. Lichenologist 17(2): p. 213 - 219.
- 793 HILEMAN, B., 1983. Acid fog. Environment Science and Technology, 17(3): p. 117A - 120A.
- 1422 HODGKIN, S.E., D. BRIGGS, 1981. The effect of simulated acid rain on two populations of Senecio vulgaris L. The New Phytologist 89(4): p. 687 - 691.
- 519 HOFFMAN, Jr., W.A., S.E. LINDBERG, R.R. TURNER, 1980. Precipitation Acidity: The Role of the Forest Canopy in Acid Exchange. J. Environ. Qual. 9(1): p. 95 - 100.
- 164 HORNBECK, J.W., G.E. LIKENS, J.S. EATON, 1977. Seasonal Patterns in Acidity of Precipitation and their Implications for Forest Stream Ecosystems. Water, Air and Soil Pollution 7: p. 355 - 365.
- 1569 HORNTVEDT, R., G.J. DOLLARD, E. JORANGER, 1980. Effects of acid precipitation on soil and forest. 2. Atmosphere-vegetation interactions. In: Ecological impact of acid precipitation. Proceeding of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. p. 192 - 193.

(section 4)

- 178 HOVLAND, J., 1981. The effect of artificial acid rain on respiration and cellulase activity in Norway spruce needle litter. Soil Biol. Biochem. 13(1): p. 23 - 26.
- 305 HOVLAND, J., Y.Z. ISHAC, 1975. Effects of Simulated Acid Precipitation and Liming on Nitrification in Forest Soil. SNSF-Project, Rapport IR 14/75, Oslo. 15 p.
- 1475 HUETTERMANN, A., 1985. The effect of acid deposition on the physiology of the forest ecosystem. Experientia 41(5): p. 584 - 590.
- 580 HUTCHINSON, T.C. 1981. The ecological consequences of acid discharges from industrial smelters. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 13 p.
- 831 HUTTUNEN, S., 1982. Dispersion and effects of airborne sulfur compounds on forest environments in the Uusimaa district (Finland). Luonnon Tutkija, 86(1): p. 39 - 42. (En finnois avec résumé en anglais).
- 1086 IRVING, P.M., 1983. Acidic precipitation effects on crops: A review and analysis of research. J. Environ. Qual. 12(4): p. 442 - 453.
- 1479 IRVING, P.M., 1985. Modeling the response of greenhouse-grown radish Raphanus-sativus plants to acidic rain. Environ. Exp. Bot. 25(4): p. 327 - 338.
- 637 IRVING, P.M., J.E. MILLER, 1981. Productivity of field-grown soybeans exposed to acid rain and sulphur dioxide alone and in combination. Journal of Environmental Quality, 10(4): p. 473 - 478.
- 302 ISHAC, Y.Z., J. HOVLAND, 1976. Effects of simulated acid precipitation and liming on pine litter decomposition. SNSF-Project, Rapport IR 24/76, Oslo: 20 p.
- 813 JACOBSON, J.S., J.J. TROIANO, 1983. Fonctions de dosage-réponse décrivant les effets des précipitations acides sur la végétation. Bulletin de la Qualité des Eaux, VIII(2): p. 68 - 72.
- 1332 JENSEN, K.F., 1985. Interactive effects of sulfur dioxide, ozone and simulated acid rain on growth of Liriodendron-tulipifera L. seedlings. Am. J. Bot. 72(6): p. 906 - 907.

(section 4)

- 1366 JOHANNES, A.E., E.R. ALTWICKER, N.L. CLESCERI, 1985. The integrated lake-watershed acidification study; atmospheric inputs. Water Air Soil Pollut. 26(4): p. 339 - 354.
- 1141 JOHNSON, A.H., T.G. SICCAMI, 1983. Acid deposition and forest decline. Environmental Science and Technology, 17(7): p. 294A - 305A.
- 738 JOHNSON, D.W., J. TURNER, J.M. KELLY, 1982. The effects of acid rain on forest nutrient status. Water Resources Research, 18(3): p. 449 - 461.
- 791 JOHNSTON Jr., J.W., D.S. SHRINER, C.I. KLARER, D.M. LODGE, 1982. Effect of rain pH on senescence, growth, and yield of bush bean. Environmental and Experimental Botany, 22(3): p. 329 - 337.
- 1481 JOHNSTON, J.W. JR, D.S. SHRINER, 1985. Responses of three wheat Triticum-aestivum cultivars to simulated acid rain. Environ. Exp. Bot. 25(4): p. 349 - 354.
- 195 JONSSON, B., 1977. Soil Acidification by Atmospheric Pollution and Forest Growth. Water, Air and Soil Pollution 7: p. 497 - 501.
- 364 JOURNAULT-DUPONT C., 1979. Etude écologique de la région de Rouyn - Noranda. Conférence sur les contaminants dans l'environnement, Québec, 14-15 mai. 43 p.
- 647 KEEVER, G., J.S. JACOBSON, 1981. Acid rain sensitivity in glycine max "Clark" as related to trichome status. Hortscience, 16: p. 414.
- 1172 KEEVER, G.J., J.S. JACOBSON, 1983. Simultated acid rain effects on Zinnia as influenced by available nutrients. J. Amer. Soc. Hort. Sci. 108(1): p. 80 - 83.
- 1485 KEIZER, P.J., 1985. Coltricia in the Netherlands. Coolia 28(2): p. 6 - 10.
- 317 KEYSER, H.H., D.N. MUNNS, J.S. HOHENBERG, 1979. Acid tolerance of Rhizobia in culture and in symbiosis with Cowpea. Soil Science Society of America Journal 43(4): p. 719 - 722.

(section 4)

- 1084 KILLHAM, K., M.K. FIRESTONE, 1983. Vesicular arbuscular mycorrhizal mediation of grass response to acidic and heavy metal depositions. Plant and Soil 72(1): p. 39 - 48.
- 13 KNABE, W., 1976. Effects of Sulfur Dioxide on Terrestrial Vegetation. Ambio 5(5-6): p. 213 - 218.
- 141 KRAUSE, G.H.M., H. KAISER, 1977. Plant Response to Heavy Metals and Sulphur Dioxide. Environmental Pollution 12: p. 63 - 71.
- 313 LAMOREAUX, R.J., W.R. CHANEY, 1978. Photosynthesis and Transpiration of Excised Silver Maple Leaves Exposed to Cadmium and Sulphur Dioxide. Environmental Pollution 17(4): p. 259 - 268.
- 1198 LANG, D.S., KRUPA, S.V., D.S. SHRINER, 1978. Injury to vegetation incited by sulfuric acid aerosols and acidic rain. 71st Annual Meeting of the Air Pollution Control Association, Houston, Texas. June 25-30, 1978. 15 p.
- 1417 LARSEN, B.R., 1985. Effects of simulated acid rain and racemic 2-2-4 dichlorophenoxypropionic-acid on selected crops. Ecotoxicol. Environ. Saf. 10(2): p. 228 - 238.
- 460 LEE, J.J., D.E. WEBER, 1980. Effects of Sulfuric Acid Rain on two Model Hardwood Forests: Throughfall, Litter Leachate, and Soil Solution. EPA-600/3-80-014, Corvallis Environmental Research Laboratory. 38 p.
- 740 LEE, J.J., D.E. WEBER, 1982. Effects of sulfuric acid rain on major cation and sulfate concentrations of water percolating through two model hardwood forests. J. Environ. Qual., 11(1): p. 57 - 64.
- 456 LEE, J.J., G.E. NEELY, S.C. PERRIGAN, 1980. Sulfuric Acid Rain Effects on Crop Yield and Foliar Injury. EPA-600/3-80016, Corvallis Environmental Research Laboratory. 50 p.
- 316 LEE, J.L., D.E. WEBER, 1979. The Effect of Simulated Acid Rain on Seedling Emergence and Growth of Eleven Woody Species. Forest Science 25(3): p. 393 - 398.
- 1489 LIKENS, G.E., 1985. An experimental approach for the study of ecosystems, the 5th Tansley lecture. J. Ecol. 73(2): p. 381 - 396.

(section 4)

- 200 LINDBERG, S.E., R.C. HARRISS, 1981. The role of atmospheric deposition in an Eastern U.S. deciduous forest. Water Air Soil Pollut. 16(1): p. 13 - 31.
- 725 MAGNAN, P., 1982. Etude de la sensibilité aux précipitations acides de 22 lacs du Parc national de la Mauricie. Environnement Canada, Direction générale des eaux intérieures, région du Québec. 44 p.
- 447 MALMER, N., 1974. On the Effects on Water, Soil and Vegetation of an Increasing Atmospheric Supply of Sulphur. National Swedish Environment Protection Board, SNV-PM-402E, 98 p.
- 1497 MARIER, J.R., 1985. Interrelations between magnesium and some trace elements in soil and water with regard to disease processes. J. Am. Coll. Nutr. 4(3): p. 334.
- 1498 MARTIN, Y., 1985. Biogeochemical indication of environmental pollution with the aid of cryptogams. Eesti. Nsv. Tead Akad. Toim. Biol. 34(1): p. 1 - 15.
- 1499 MATZNER, E., B. ULRICH, 1985. Implications of the chemical soil conditions for forest decline. Experientia 41(5): p. 578 - 584.
- 248 MAYER, R., B. ULRICH, 1977. Acidity of precipitation as influenced by the filtering of atmospheric sulphur and nitrogen compounds - its role in the element balance and effect on soil. Water, Air and Soil Pollution 7(3): p. 409 - 416.
- 881 MAYER, R., H. HEINRICHS, 1981. Concentrations of chemical elements in tree roots including heavy metals from air pollution. Zeitschrift für Pflanzenernährung und Bodenkunde 144(6): p. 637 - 646. (En allemand avec résumé en anglais).
- 617 McLEAN, R.A.N., G.H. TOMLINSON, 1981. Les pluies acides et leurs effets potentiels sur les forêts. Congrès de l'Association Forestière du Québec, 3 octobre 1981. 16 p.
- 495 McMASTER UNIVERSITY, 1981. Aluminum: Chemistry, Analysis and Biology. Environmental Geochemistry Report: 174 p.

(section 4)

- 1269 MEDEIROS, W.H., P.D. MOSKOWITZ, E.A. COVENEY, H.C. THODE, Jr., N.L. ODEN, 1984. Oxidant and acid precipitation effects on soybean yield: cross sectional model development. Environment International, 10(1): p. 27 - 33.
- 1502 MEIER, S., R.I. BRUCK, L.F. GRAND, 1985. Effects of simulated acidified rain solutions on ectomycorrhizal growth and development of loblolly pine Pinus-taeda seedlings. Phytopathology 75(11): p. 1338.
- 773 MEIWES, K.J., P.K. KHANNA, 1981. Distribution and cycling of sulphur in the vegetation of two forest ecosystems in an acid rain environment. Plant and Soil, 60(3): p. 369 - 375.
- 309 MILLER, J.E., P.B. XERIKOS, 1979. Residence Time of Sulphite in SO<sub>2</sub> 'Sensitive' and 'Tolerant' Soybean Cultivars. Environmental Pollution 18(4): p. 259 - 264.
- 741 MOLLITOR, A.V., D.J. RAYNAL, 1982. Acid precipitation and ionic movements in Adirondack forest soils. Soil Sci. Soc. Am. J. 46(1): p. 137 - 141.
- 857 NICHOLSON, I.A., I.S. PATERSON, 1983. Aspects des précipitations acides par rapport à la végétation au Royaume-Uni. Bulletin de la Qualité des Eaux VIII(2): p. 60 - 67.
- 1270 NIHLGARD, B., 1985. The ammonium hypothesis - an additional explanation to the forest dieback in Europe. Ambio 14(1): p. 2 - 8.
- 788 NILSSON, S.I., H.G. MILLER, J.D. MILLER, 1982. Forest growth as a possible cause of soil and water acidification: an examination of the concepts. Oikos 39(1): p. 40 - 49.
- 1156 NORBY, R.J., R.J. LUXMOORE, 1983. Growth analysis of soybean exposed to simulated acid rain and gaseous air pollutants. New Phytol. 95(2): p. 277 - 287.
- 1393 NUOTIO, T., J. HYYPPA, J. KAMARI, 1985. Buffering properties of soils in 53 forested catchments in southern Finland. Aqua Fenn. 15(1): p. 35 - 40.
- 92 ODEN, S., 1972. The extent and effects of atmospheric pollution on soils. FAO Soils Bull. 16: p. 179 - 194.

(section 4)

- 1108 OLSON, R.A., 1983. The impacts of acid deposition on N and S cycling. Environmental and Experimental Botany 23(3): p. 211 - 223.
- 1509 OLSON, R.L. JR, W.E. WINNER, L.D. MOORE, 1985. The effect of concurrent ozone and acid rain treatments on radish Raphanus-sativus growth; preliminary results. Phytopathology 75(5): p. 627.
- 706 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. Acidic precipitation in Ontario study, An Annotated bibliography, Terrestrial effects of acidic precipitation. APIOS report no. 003/81. 181 p.
- 1512 OWNBY, J.D., L. DEES, 1985. Growth and mineral nutrient status in peanut Arachis-hypogaea cultivar spanco and sorghum Sorghum-bicolor cultivar BR-493 in response to acid precipitation and aluminum. New Phytol. 101(2): p. 325 - 332.
- 645 PAPAROZZI, E.T., H.B. TUKEY Jr., 1981. The effects of simulated acid rain on leaves of phaseolus vulgaris cultivar red-kidney. Hortscience 16: p. 413.
- 1104 PAPAROZZI, E.T., H.B. TUKEY, Jr., 1983. Developmental and anatomical changes in leaves of Yellow birch and Red Kidney bean exposed to simulated acid precipitation. J. Amer. Soc. Hort. Sci. 108(6): p. 890 - 898.
- 870 PATILA, A., 1982. Factors influencing the acidification of lakes. Luonnon Tutkija, 86(1): p. 3 - 6. (En finnois avec résumé en anglais).
- 1516 PEDERSEN, W.L., T.R. PHILLIPS, L.J. BRANDENBURG, 1985. The effect of simulated acid rain on Exserohilum-turcicum and corynebacterium-michiganense pathovar nebraskense. Phytopathology 75(11): p. 1277.
- 1517 PHILLIPS, G.M., L.M. RAITT, J. AALBERS, 1985. Effect of simulated acid rain and sulfur nutrition on the growth sulfate and cation content of Bromus-diandrus. S. Afr. J. Plant. Soil 2(2): p. 98 - 100.
- 1520 PISUT, I., E. LISICKA, 1985. A study of cryptogamic epiphytes on oak trunk in the vicinity of Bratislava Czechoslovakia in the years 1973-1983. Ekologia-CSSR 4(2): p. 225 - 234.

(section 4)

- 370 PORTER, J.R., R.P. SHERIDAN, 1981. Inhibition of Nitrogen Fixation in Alfalfa by Arsenate, Heavy Metals, Fluoride, and Simulated Acid Rain. Plant Physiol. 68(1): p. 143 - 148.
- 1195 POSTEL, S., 1984. Les forêts dans un monde de combustibles fossiles. Etude numéro 58 de l'Institut de prospective mondiale (trad. de l'ang.: Forests in a fossil fuel world, Worldwatch Paper 58.). 41 p.
- 896 PUCKETT, L.J., 1982. Acid rain, air pollution and tree growth in southeastern New-York. Journal of Environmental Quality 11(3): p. 376 - 381.
- 480 RAMBERG, L., 1981. Increase in Stream pH after a Forest Drainage. Ambio 10(1): p. 34 - 35.
- 777 RAYNAL, D.J., J.R. ROMAN, W.M. EICHENLAUB, 1982. Response of tree seedlings to acid precipitation. I- Effect of substrate acidity on seed germination. Environmental and Experimental Botany, 22(3): p. 377 - 383.
- 778 RAYNAL, D.J., J.R. ROMAN, W.M. EICHENLAUB, 1982. Response of tree seedlings to acid precipitation II - Effect of simulated acidified canopy throughfall on sugar maple seedling growth. Environmental and Experimental Botany, 22(3): p. 385 - 392.
- 1274 REBBECK, J., E. BRENNAN, 1984. The effect of simulated acid rain and ozone on the yield and quality of glasshouse-grown alfalfa. Environmental Pollution (Series A) 36(1): p. 7 - 16.
- 1526 REICH, P.B., A.W. SCHOETTLE, H.F. STROO, J. TROIANO, P.G. AMUNDSON, 1985. Effects of ozone, sulfur dioxide and acidic rain on mycorrhizal infection in northern red oak Quercus-rubra seedlings. Can. J. Bot. 63(11): p. 2049 - 2055.
- 1275 RENEZ, A.N., K.E. PERCY, I.M. KETTLES, 1985. Predicting terrain sensitivity to acid rain: scientists integrate data sets. Geos 1985/1: p. 21 - 25.
- 187 REUSS, J.O., 1977. Chemical and Biological Relationships Relevant to the Effect of Acid Rainfall on the Soil-Plant System. Water, Air and Soil Pollution 7(4): p. 461 - 478.

(section 4)

- 365 ROBITAILLE, G., 1979. Pollution and the annual rings of Abies balsamea. Conférence sur les contaminants dans l'environnement, Québec, 14-15 mai. 17 p.
- 722 ROBITAILLE, G., 1980. Acid Precipitation and Vegetation. Environment Canada, Canadian Forestry Service, Québec. 21 p.
- 619 RUBEC, C.D.A., 1981. Les caractéristiques des écosystèmes terrestres par les précipitations acides au Canada. Document de travail no 19. Environnement Canada, Direction générale des terres. 32 p.
- 935 SCHERBATSKOY, T., R.M. KLEIN, 1983. Response of spruce and birch foliage to leaching by acidic mists. J. Environ. Qual. 12(2): p. 189 - 195.
- 174 SCHOFIELD, E., W.L. HAMILTON, 1970. Probable Damage to Tundra Biota Through Sulphur Dioxide Destruction of Lichens. Biological Conservation 2(4): p. 278 - 280.
- 289 SEIP, H.M., G. ABRAHAMSEN, E.T. GJESSING, A. STUANES, 1979. Studies of soil-, precipitation - and run-off chemistry in six small natural plots ("mini-catchments"). SNSF-Project Rapport IR 46/76, Oslo. 62 p.
- 572 SHAW, G.G. 1981. The effect of SO<sub>2</sub> on selenium concentration in Serviceberry. Trans Northeast sect. Wildl. Soc., 38: p. 136 - 143.
- 618 SHRINER, D.S., 1980. Terrestrial vegetation air pollutant interactions: nongaseous pollutants, wet deposition. Proceedings of International Conference on air pollutants and their effects on terrestrial ecosystems. Banff, Alberta, May 10-17. 30 p.
- 1412 SIGAL, L.L., J.W. JR JOHNSTON, 1986. Effects of acid rain and ozone on nitrogen fixation and photosynthesis in the lichen Lobaria-pulmonaria. Environ. Exp. Bot. 26(1): p. 59 - 64.
- 1410 SIGAL, L.L., J.W. JR JOHNSTON, 1986. Effects of simulated acid rain on one species each of Pseudoparmelia usnea and umbilicaria. Water Air Soil Pollut. 27(3-4): p. 315 - 322.
- 1162 SITWELL, N., 1984. Our trees are dying. Science Digest, Sept. 84. p. 39 - 48, 96.

(section 4)

- 1543 STOPP, G.H. JR, 1984. Acidified precipitation and rhizobial nodulation on soybeans. J. Soil Biol. Ecol. 4(2): p. 132 - 133.
- 748 SUAREZ, E.L., U.S. JONES, 1982. Atmospheric sulfur as related to acid precipitation and soil fertility. Soil Sci. Soc. AM. J. 46: p. 976 - 980.
- 650 SULLIVAN, C.R., 1981. Précipitations acides: aperçu général se référant particulièrement aux répercussions sur les écosystèmes forestiers. 8e atelier annuel, Centre de recherche forestière des Grands Lacs, Sault-Ste-Marie du 3 au 5 juin 1981. 20 p.
- 11 TAMM, C.O., 1976. Acid Precipitation: Biological Effects in Soil and on Forest Vegetation. Ambio 5(5-6): p. 235 - 238.
- 185 TAMM, C.O., E.B. COWLING, 1977. Acidic Precipitation and Forest Vegetation. Water, Air and Soil Pollution 7(4): p. 503 - 511.
- 1233 TOMLINSON II, G.H., 1983. Air pollutants and forest decline. Environ. Sci. Technol. 17(6): p. 246A - 256A.
- 494 TOMLINSON, G.H., 1981. Acid Rain and the Forest - The Effect of Aluminum and the German Experience. Domtar, Centre de recherche Senneville, Québec, projet no. 74-7124-13: 22 p.
- 487 TRESHOW, M., 1980. Pollution Effects on Plant Distribution. Environmental Conservation 7(4): p. 279 - 286.
- 887 TROIANO, J., L. COLAVITO, L. HELLER, D.C. McCUNE, 1982. Viability, vigor and maturity of seed harvested from two soybean cultivars exposed to simulated acidic rain and photochemical oxidants. Agriculture And Environment 7(3-4): p. 275 - 283.
- 934 TROIANO, J., L. COLAVITO, L. HELLER, D.C. McCUNE, J.S. JACOBSON, 1983. Effects of acidity of simulated rain and its joint action with ambient ozone on measures of biomass and yield in soybean. Environmental and Experimental Botany 23(2): p. 113 - 119.
- 735 TROIANO, J., L. HELLER, J.S. JACOBSON, 1982. Effect of added water and acidity of simulated rain on growth of fieldgrown radish. Environmental Pollution 29: p. 1 - 11.

(section 4)

- 1281 UNSWORTH, M.H., 1984. Evaporation from forests in cloud enhances the effect of acid deposition. Nature 312: p. 262 - 265.
- 1551 VAN BRUGGEN, A.H.C., J. OSMELOSKI, L. HELLER, J. JACOBSON, 1985. Effect of acidic precipitation on germination of Alternaria-solani and its infection efficiency on potato. Phytopathology 75(11): p. 1318.
- 175 VARSHNEY, C.K., J.K. GARG, 1979. Plant Responses to Sulphur Dioxide Pollution. Critical Reviews in Environmental Control 9(1): p. 27 - 49.
- 1415 WALDMAN, J.M., J.W. MUNGER, D.J. JACOB, M.R. HOFFMAN, 1985. Chemical characterization of stratus cloudwater and its role as a vector for pollutant depositions in a Los-Angeles, California, USA, pine forest. Tellus Ser. B Chem. Phys. Meteorol. 37(2): p. 91 - 108.
- 166 WHITBY, L.M., P.M. STOKES, T.C. HUTCHINSON, G. MYSLIK, 1976. Ecological Consequence of Acidic and Heavy-Metal Discharges from the Sudbury Smelters. Canadian Mineralogist 14: p. 47 - 57.
- 91 WHITTAKER, R.H., F.H. BORMANN, G.E. LIKENS, T.G. SICCAMA, 1974. The Hubbard Brooks Ecosystem Study: Forest Biomass and Production. Ecological Monographs 1974 44 (2): p. 233 - 252.
- 201 WINNER, W.E., J.D. BEWLEY, 1978. Contrasts between Bryophyte and Vascular Plant Synecological Responses in an SO<sub>2</sub> -Stressed White Spruce Association in Central Alberta. Oecologia 33(3): p. 311 - 325.
- 199 WOOD, T., F.H. BORMANN, 1977. Short-Term Effects of A Simulated Acid Rain upon the Growth and Nutrient Relations of Pinus Strobus, L. Water, Air and Soil Pollution 7: p. 479 - 488.



## CHAPITRE 5: FAUNE TERRESTRE

### Cote

- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 575 HAGVAR, S., T. AMUNDSEN. 1981. Effects of liming and artificial acid rain on the mite (Acari) fauna in coniferous forest. Oikos, 37(1): p. 7 - 20.
- 580 HUTCHINSON, T.C. 1981. The ecological consequences of acid discharges from industrial smelters. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 13 p.
- 465 KILLHAM, K., M. WAINWRIGHT. 1981. Deciduous leaf litter and cellulose decomposition in soil exposed to heavy atmospheric pollution. Environmental Pollution, 26(1): p. 79 - 85.
- 1493 LUTZ, W., 1985. Results of studies on roe deer Capreolus-capreolus and hare Lepus-europaeus for heavy metals and chlorinated hydrocarbons in the North-Rhine-Westphalia, West Germany. Z. Jagdwiss 31(3): p. 153 - 175.
- 1407 NEWMAN, J.R., R.K. SCHREIBER, 1985. Effect of acidic deposition and other energy emissions on wildlife; a compendium. Vet. Hum. Toxicol. 27(5): p. 394 - 401.
- 416 PRESTON, E.M., R.A. LEWIS (eds), 1978. The Bioenvironmental Impact of a coal-fired power plant, Colstrip, Montana. EPA-600/3-78-021, Corvallis Environmental Research Lab., Oreg. (microfiches).



## CHAPITRE 6: GENERALITES

### 6. 1 Ouvrages de vulgarisation

#### Cote

- 21 ANONYME, 1979. The International Joint Commission and Acid Rain. Canadian Environmental Control, Newsletter (156): p. 1333 - 1337.
- 55 ANONYME, 1979. Acid Rain Symposium. Sport Fishing Institute, SFI Bulletin 304. 8 p.
- 420 ANONYME, 1979. Tracking the Clues to Acid Rains. Aware Mag., (110): p. 2 - 5.
- 430 ANONYME, 1979. Unlocking Mysteries of Acid Rains. Aware Mag., (109): p. 7.
- 440 ANONYME, 1980. News From FOE (Friends of the Earth) - Acid Rain. Alternatives, 9(2): p. 2.
- 648 ANONYME, 1982. Acid rain problem - and solutions. In-Site, 6(6): p. 66.
- 649 ANONYME, 1982. De l'acide comme s'il en pleuvait. Eco 3 Magazine, (109): p. 14
- 343 ANONYME, 1979. EPA Projects Worsening Acid Rain Problem in United States Through Century's End. Journal of the Air Pollution Control Association 29 (12): p. 1250 - 1251.
- 663 BABICH, H., D.L. DAVIS, G. STOTZKY, 1980. Acid precipitation: Causes and consequences. Environment 22(4): p. 6 - 41.
- 902 BORMANN, F.H., 1982. The New England landscape: air pollution stress and energy policy. Ambio 11(4): p. 188 - 194.
- 903 BORMANN, F.H., 1982. The effects of air pollution on the New England landscape. Ambio 11(6): p. 338 - 346.
- 262 BORMANN, F.H., 1974. Acid Rain and the Environmental Future. Environmental Conservation 1 (4): p. 270
- 803 BOYLE, R.H., R.A. BOYLE, 1983. Acid rain. The Amicus Journal 4(3): p. 22 - 37.

(section 6. 1)

- 484 BUAT-MENARD, P., 1981. La pollution atmosphérique atteint-elle le fond des océans?. La Recherche, 12(119): p. 228 - 230.
- 561 BUDIANSKY, S. 1980. Acid rain and the missing link. Environmental Science and Technology, 14(10): p. 1172 - 1173.
- 488 CANADA. ENVIRONNEMENT CANADA. 1980. Les pluies acides. Feuillelet météorologique, 19(12): p. 199 - 207.
- 508 CANADA. ENVIRONNEMENT CANADA. 1981. L'Odyssée des pluies acides. (aussi disponible en anglais) ISBN0-662-91086-9. 22 p.
- 14 CANADA. SOUS-COMITE SUR LES PLUIES ACIDES, 1981. Les eaux sournoises. Rapport du sous-comité sur les pluies acides du Comité permanent des pêches et des forêts. Chambre des communes. Canada. ISBN0-662-91337-X. 158 p.
- 558 CANADA. SUB-COMMITTEE ON ACID RAIN. 1981. Still waters. Report of the sub-committee on acid rain of the standing Committee on fisheries and forestry. House of commons. ISBN 0-662-11723-9. 150 p.
- 907 CARROLL, J., 1983. Acid rain diplomacy: the need for a bilateral resolution. Alternatives 11(2): p. 9 - 12.
- 565 CHOQUETTE, P.J., 1980. Pluies acides. Condensé II. Direction générale de l'assainissement de l'air, Environnement Canada. Conférence présentée à: Séance d'information du 29 avril 1980, Comité de conservation de l'Environnement de Saint-Félicien, Québec. 41 p.
- 226 COLLINS, R., 1980. Acid Rain: Scourge From the Skies. The Reader's Digest June 1980: p. 49 - 54.
- 270 COLLINS, R., 1980. Le fléau des pluies acides. Sélection du Reader's Digest (septembre): p. 121 - 130.
- 350 COTE, D., 1980. Les pluies acides et l'agriculture. Le Producteur Agricole, Sept. 1980: p. 17 - 20.
- 651 COWLING, E.B., R.A. LINTHURST, 1981. The acid precipitation phenomenon and its ecological consequences. Bioscience, 31(9): p. 649 - 654.
- 307 DELAND, M.R., 1980. Acid Rain. Environmental Science & Technology 14 (6): p. 657

(section 6. 1)

- 75 DELISLE, A, 1981. Pluies acides, Négocier la qualité...du Québec. Réseau 12(9): p. 8 - 10.
- 612 DELISLE, A., 1982. Le réveil acide du Québec. Québec Science, 20(9): p. 28 - 32.
- 616 DELISLE, A., 1982. Six acteurs en quête d'un scénario. Compterendu d'une table ronde organisée par Québec Science sur la question des pluies acides, le 19 février 1982. Québec Science, 20(9): p. 56 - 60.
- 69 DION, D., 1981. Pluies acides: La Baie James et les Basses Laurentides menacées. Feuillet météorologique 20(7): p. 90 - 92.
- 1199 DIVER, G., 1982. Pluies acides, pollution atmosphérique, et votre santé. Publié par Canada & The World sous les auspices de Santé et Bien-être social Canada. 8 p.
- 658 DOTTO, L., 1979-1980. What acid rain does to our land and water. Canadian geographic 99(3): p. 36 - 41.
- 655 FARBER, P.S. (ed.), 1980. Acid rain: an international concern. J. Air Pollut. Control Assoc. 30(10): p. 1089 - 1097.
- 963 FOX, J., 1983. Les pluies acides. Le Consommateur Canadien: 13(5): p. 7 - 12.
- 608 FRIENDS OF THE BOUNDARY WATERS WILDERNESS, inc., 1980. Acid Rain - The Choice is ours. Environmental Education Series, Minneapolis, Minnesota. Diapositives avec cassette.
- 4 GALLOWAY, J.N., E.B. COWLING, 1978. The Effects of Precipitation on Aquatic and Terrestrial Ecosystems: A Proposed Precipitation Chemistry Network. Journal of the Air Pollution Control Association, 28(3): p. 229 - 235.
- 677 GANNON, J., 1978. Acid rain fallout: pollution and politics. Nat. Parks Conserv. Mag. 52(10): p. 16 - 21.
- 560 GORDON, B. 1979. The deadly dilemma of acid rain. Conservation News 44(19). 3 p.
- 1204 HENRY, B., 1984. Scruter la pluie: Comment elle s'acidifie dans l'atmosphère. Dimension Science 1984/2: p. 18 - 24.

(section 6. 1)

- 1238 HILEMAN, B., 1984. Acid rain perspectives: A tale of two countries. Environ. Sci. Technol. 18(11): p. 341A - 344A.
- 621 KISH, T., 1981. Acid precipitation: crucial questions still remain unanswered. J. Water Pollut. Control Fed., 53(5): p. 518 - 521.
- 486 KLEINERT, J., 1980. A Step Towards Preventing Acid Precipitation ?. Environmental Conservation, 7(4): p. 332.
- 119 LA BASTILLE, A., 1981. Acid Rain How Great a Menace ?. National Geographic, November 1981. p. 652 - 662, 668 - 680.
- 606 LIKENS, G.E., 1976. Acid Precipitation. C & EN 1976: p. 29 - 37.
- 604 LIKENS, G.E., F.H. BORMANN, N.M. JOHNSON, 1972. Acid Rain. Environment 14 (2): p. 33 - 40.
- 3 LIKENS, G.E., R.F. WRIGHT, J.N. GALLOWAY, T.J. BUTLER, 1979. Acid Rain. Scientific American 241(4): p. 43 - 51.
- 74 LIPSKE, M., 1980. Sour Rain, Deadly Rain. Defenders 55(1): p. 2 - 5.
- 490 MASTIN, M., 1974. La Cloche Past, Present and Future. Ontario Naturalist, June: p. 30 - 34.
- 68 MUNRO, M., 1981. Une pluie sournoise. Version française d'une série d'articles de Margaret Munro parue en janvier 1981 dans le Citizen d'Ottawa. Environnement Canada. 11 p.
- 34 MUNRO, M., P. KINSMAN, 1981. Unwanted Windfall. Nature Canada July/September 1981. p. 4 - 17.
- 692 MUNTON, D., 1981. Acid rain and basic politics. Alternatives 10(1): p. 21 - 28.
- 605 NISBET, I.C.T., 1974. Acid Rain: Fossil Sulfur Returned to Earth. Technology Review, 76: p. 8 - 9.
- 427 OFFICE NATIONAL DU FILM, 1982. Les pluies acides - A la croisée des chemins. Film réalisé pour Environnement Canada. 26 min. 50 sec.

(section 6. 1)

- 89 OGIIVIE, D.M., 1981. Acid Precipitation in North America: "A Hard Rain is Gonna Fall". Ambio 10(2-3): p. 148 - 149.
- 53 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1979. Acidic Precipitation in Ontario (1979). 30 p.
- 349 OUELLET, J.P., 1980. Pluies acides: Traitement à la suédoise. Québec-Science, Octobre 1980: p. 74 - 75.
- 43 PARMANN, G. 1981. The Acidification of Norway. Ambio 10(2-3) p. 150 - 151.
- 701 PAULIN, G., 1982. Le Québec et le phénomène des précipitations acides, une revue. Les Carnets de Zoologie, 42(3): p. 36 - 45.
- 859 PAULIN, G., 1982. Le Québec et le phénomène des précipitations acides, une revue. Québec: Ministère de l'Environnement du Québec, Direction de la Recherche, 40 p.
- 980 PAULIN, G., 1982. Quebec and the phenomenon of acid precipitation: a review. Ministère de l'Environnement du Québec, Direction de la recherche, 33 p.
- 127 POWER, G., 1980. Acid Rain, Smokestacks are killing our salmon. Atlantic Salmon Jour. 29(1): p. 47 - 49.
- 401 QUEBEC. MINISTERE DE L'ENVIRONNEMENT. 1980. Les précipitations acides et l'environnement. Service de l'éducation, série Banque de Travail, no 2: 20 p.
- 82 RENNIE, P.J., 1978. Proceeding of the air quality criteria workshop, January 17 - 19, 1978. Fisheries and Environment Canada, Atmospheric Environment. 6 p.
- 344 ROBINSON, Gail, 1979. Pollution parley. Environmental Action 11 (5): p. 22 - 23.
- 479 ROBITAILLE, G., 1980. Les lichens indicateurs de la pollution atmosphérique. Racine 1(3). 1 p.
- 615 ROGEL, J.P., 1982. Suède: la dépollution tranquille. Québec Science, 20(9): p. 46 - 53.
- 1160 SCHMIDT, D.J., 1981. Acid Rain. 93RD meeting of the Iowa Academy of Science, Cedar Rapids, Iowa, U.S.A., April 24-25, 1981. Proc. Iowa Acad. Sci. 88(1): p. 27.

(section 6. 1)

- 1162 SITWELL, N., 1984. Our trees are dying. Science Digest, Sept. 84. p. 39 - 48, 96.
- 984 SOCIETE POUR VAINCRE LA POLLUTION (SVP), 1981. Les pluies acides au Québec: un cancer pour l'environnement. Brochure de vulgarisation. 12 p.
- 308 SOCIETE RADIO-CANADA, 1980. Vidéo-cassette de l'émission télévisée Science-Réalité sur les Pluies acides. 24 avril 1980.
- 888 SOIL CONSERVATION SOCIETY OF AMERICA, 1983. Acid precipitation: A position statement. Ankeny, Iowa: Soil Conservation Society of America, 11 p.
- 889 STAIRS, R., 1983. Acid rain: A little chemistry. Alternatives, 11(2): p. 39.
- 546 TAYLOR, G., 1981. Oil Sands Development and Acid Rain in Alberta. Alternatives 9(4): p. 3 - 10.
- 1278 TAYLOR, R.A., 1985. Science hot on the trail of answer to acid rain. U.S. News & World Report, Jan. 14, 1985: p. 56 - 57.
- 65 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1979. Acid Rain, Research Summary. EPA-600/8-9-028: 23 p.
- 84 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1979. The acid Precipitation Problem. Research and Development (Information générale): 2 p.
- 626 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1980. Acid rain. Washington, Office of Research and Development. Jul. 1980. 1 microfiche. EPA 600/9-79-036.
- 1584 VEZINA, R., 1987. Le printemps acide. Dimensions Science et Technologie, mai 1987. p. 21 - 24.
- 216 VIE LE SAGE, R., 1982. Les pluies acides: un holocauste écologique ?. La Recherche 131: p. 304 - 306.
- 63 VIGNEAULT, Y., G. ROBITAILLE, ENVIRONNEMENT CANADA, 1979. Les effets des pluies acides sur les écosystèmes aquatiques et forestiers. Conférence prononcée le 27 octobre 1979 au Congrès de l'Association des biologistes du Québec à Montréal. 13 p.

## 6. 2 Ouvrages de synthèse

- 632 ANONYME, 1979. Acid rain. SFI Bulletin, (304): p. 5-6.
- 40 ANONYME, 1972. Sulphur Pollution Across National Boundaries. Ambio 1972 1 (1): p. 15 - 20.
- 1106 ARTHUR, M.F., C.K. WAGNER, 1983. Supplemental literature review. Environmental and Experimental botany 23(3): p. 259 - 279.
- 478 ASAP, 1979. Proceedings of the Action Seminar on Acid Precipitation. Nov. 1, 2, 3, 1979, Toronto, Ont.: 315 p.
- 1011 BEILKE, S., 1983. Acid deposition - the present situation in Europe. In: Acid Deposition. Proceedings of the Commission of the European Communities held in Berlin, 9 September 1982. D. Reidel Publishing Company, Holland. p. 3 - 30.
- 902 BORMANN, F.H., 1982. The New England landscape: air pollution stress and energy policy. Ambio 11(4): p. 188 - 194.
- 903 BORMANN, F.H., 1982. The effects of air pollution on the New England landscape. Ambio 11(6): p. 338 - 346.
- 151 BRAEKKE, F.H. (éd.) 1976. Impact of Acid Precipitation on Forest and Fresh-water Ecosystems in Norway. SNSF-Project, Research Report 6/76, Oslo: 111 p.
- 434 BROUZES, R.J.P., R.A.N. McLEAN, G.H. TOMLINSON, 1977. Mercury - The link between pH of natural waters and the mercury content of fish. Domtar Research Centre, Senneville, Québec. 35 p.
- 787 BROWNE, F.X., J.B. ORR, T.J. GRIZZARD, B.L. WEAND, 1982. Nonpoint sources. Journal of Water Pollution Control Federation, 54(6): p. 755 - 763.
- 60 CANADA. ENVIRONNEMENT CANADA. 1979. Polluants aéroportés - Pluies acides secteur terrestre Québec et l'est du Canada. Rapport d'Etape. Québec, Service canadien des forêts. 24 p.

(section 6. 2)

- 35 CANADA. ENVIRONMENT CANADA. 1979. Proceedings of a workshop on long range transport of air pollution and its impact on the Atlantic Provinces. Atmospheric Environment Service, Atlantic Region. 108 p.
- 171 CANADA. ENVIRONNEMENT CANADA, 1981. Sensibilité des écosystèmes aquatiques aux effets des retombées des polluants atmosphériques au Québec. Direction générale des eaux intérieures, région du Québec. 46 p.
- 864 CANADA. ENVIRONNEMENT CANADA, 1983. Les précipitations acides: 1re partie. Centre canadien des eaux intérieures, Burlington. Bulletin de la qualité des eaux, VIII (2): 52 p.
- 860 CANADA. ENVIRONNEMENT CANADA, 1983. Les précipitations acides: 2e partie. Centre canadien des eaux intérieures, Burlington. Bulletin de la qualité des eaux, VIII (3): p. 115 - 171.
- 1598 CANADA. ENVIRONMENT CANADA, 1988. Effects of acid rain on Atlantic Canada's inland waters. Government of Canada, Environment Canada, Inland Waters Directorate, Water Quality Branch. 6 p.
- 1620 CANADA. MINISTÈRE DES PÊCHES ET DES OcéANS, 1987. Effets des précipitations acides sur les écosystèmes lacustres et fluviaux du Québec: rétrospective des activités de recherche du ministère des Pêches et des Océans (1981-1985). Pêches et Océans, Rapp. tech. can. sci. halieut. aquat. 1554: 68 p.
- 1586 CANADA. MINISTRE DE L'ENVIRONNEMENT, 1987. Notes pour une allocution de l'honorable Tom McMillan, C.P., député devant la National Conservation and Parks Association, National Press Club, Washington, D.C. Canada, Ministre de l'Environnement, discours du 28 septembre 1987. 14 p.
- 106 CANADA. SOUS-COMITE SUR LES PLUIES ACIDES, 1981. Résumé du rapport du sous-comité sur les pluies acides du comité permanent des pêches et des forêts. 20 p.
- 14 CANADA. SOUS-COMITE SUR LES PLUIES ACIDES, 1981. Les eaux sournoises. Rapport du sous-comité sur les pluies acides du Comité permanent des pêches et des forêts. Chambre des communes. Canada. ISBN 0-662-91337-X. 158 p.

(section 6. 2)

- 558 CANADA. SUB-COMMITTEE ON ACID RAIN. 1981. Still waters. Report of the sub-committee on acid rain of the standing Committee on fisheries and forestry. House of commons. ISBN 0-662-11723-9. 150 p.
- 333 CANADA. UNITED STATES LAW INSTITUTE, 1982. Proceedings. The Transnational Implications of Acid Rain. Canada - United States Law Journal, Vol. 5, 1982, Cleveland, Ohio, 124 p.
- 757 CENTRAL ELECTRICITY RESEARCH LABORATORIES, 1979. Ecological Effects of Acid Precipitation. Prepared for Electric Power Research Institute, EPRI EA-79-6-LD, California. 216 p.
- 134 CHARETTE, J.-Y., 1981. L'impact des précipitations acides sur la faune ichtyenne du Québec. Texte de la conférence présentée à l'atelier sur la gestion de l'Ombre de fontaine, Duchesnay, Québec le 18 novembre 1981. 37 p.
- 469 CHARLES, D., R. BOOTH, R. CRAIG, R. CURRAN, 1975. Position of the Adirondack Park Agency on Acid Precipitation and its effects on the Adirondack Park. First Draft: 51 p.
- 1017 CHESTER, P.F., 1981. Acid rain, SO<sub>2</sub>, emissions and fisheries. IEEE Power Engineering Society. Special publication (20): p. 13 - 18.
- 172 CHOQUETTE, P.J., 1980. Pluies acides. (Condensé). Présenté au Mardi écologique du 11 mars 1980, Comité Conservation Environnement Alma Inc.: 17 p.
- 28 COWLING, E.B., 1981. A status report on acid precipitation and its ecological consequences as of April 1981. School of Forest Resources, North Carolina State University. 13 p.
- 657 COWLING, E.B., 1982. Acid precipitation in historical perspective. Environ. Sci. Technol. 16(2): p. 110A - 123A.
- 1027 D'ITRI, F.M. (éd.), 1982. Acid precipitation. Effects on ecological systems. Ann Arbor Science Publishers. Michigan. 506 p.

(section 6. 2)

- 1259 DELISLE, C.E., L. ROY-ARCAND, M.A. BOUCHARD, 1985. Effets des précipitations acides sur les divers écosystèmes: Synthèse bibliographique. Ecole Polytechnique, Université de Montréal; Environnement Canada, Service de la protection de l'environnement; La Fondation canadienne Donner. 307 p.
- 1594 DEPARTMENT OF FISHERIES AND OCEANS, 1987. Effects of acid precipitation on lake and river ecosystems in Quebec: Review of Department of Fisheries and Oceans research activities (1981-1985). Canadian Technical Report of Fisheries and Aquatic Sciences. 1554: 65 p.
- 598 DICKSON, W., 1975. The Acidification of Swedish Lakes. Inst. Freshwater Res. 54: p. 8 - 20.
- 44 DVORAK, A.J., B.G. LEWIS, et al, 1978. Impacts of Coal-Fired Power Plants on Fish, Wildlife, and Their Habitats. FWS/ Bibliothèque OBS-78/29, Argonne National Laboratory, Illinois, prepared for Fish and Wildlife Service, Washington, D.C. Office of Biological Service. B.F.E.I.: 261 p.
- 348 ELLIS, J.D., A. GOLOMB, 1981. Lake Acidification and its neutralization. Ont. Hydro Res. Rev. 2: p. 67 - 74.
- 373 EMMELIN, L., 1977. Environmental planning in Sweden. The state of Sweden's lakes. Current Sweden Env. 79 (March 1977): 10 p.
- 1592 ENTENTE QUEBEC - NEW YORK SUR LES PRECIPITATIONS ACIDES, 1986. Rapport annuel 1986 sur la coopération entre le Québec et l'Etat de New York en matière de précipitations acides. Gouvernement du Québec et le New York State Department of Environmental Conservation. 62p.
- 1116 ENVIRONMENTAL RESOURCES LIMITED, 1983. Acid Rain. A review of the phenomenon in the EEC and Europe. Unipub, New-York for the Commission of the European Communities. 164 p.
- 761 ETATS-UNIS - CANADA, 1983. Sommaire des rapports des groupes de travail. Soumis conformément au Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière. 68 p.

(section 6. 2)

- 54 ETATS-UNIS - CANADA. GROUPE CONSULTATIF DE RECHERCHE SUR LE TRANSPORT DES POLLUANTS ATMOSPHERIQUES SUR DE GRANDES DISTANCES. 1979. Le transport des polluants atmosphériques sur de grandes distances en Amérique du Nord: un examen préliminaire. 29 p.
- 361 ETATS-UNIS - CANADA. GROUPE DE RECHERCHE. 1980. Le transport à grande distance de polluants atmosphériques. Deuxième rapport, novembre: 46 p.
- 762 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 1, 1983. Evaluation des répercussions. Rapport final, soumis conformément au Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière. 719 p.
- 504 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 1. 1981. Evaluation des répercussions. Rapport provisoire Etats-Unis - Canada, Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière. (version anglaise disponible). 225 p.
- 501 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3A, 1981. Elaboration et application des stratégies. Rapport provisoire Etats-Unis - Canada, Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière: 60 p. (Version anglaise disponible)
- 332 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL SUR L'EVALUATION DES EFFETS. 1981. Déclaration d'intention Canada / Etats-Unis sur la pollution atmosphérique outre-frontière. Phase II. Rapport intérimaire du groupe de travail sur l'évaluation des effets. Octobre 1981. 13 p.
- 524 EVANS, L.S., G.R. HENDREY, G.J. STENSLAND, D.W. JOHNSON, A.J. FRANCIS. 1981. Acidic precipitation: considerations for an air quality standard. Water, Air and Soil Pollution, 16(4): p. 469 - 509.
- 655 FARBER, P.S. (ed.), 1980. Acid rain: an international concern. J. Air Pollut. Control Assoc. 30(10): p. 1089 - 1097.
- 188 FERENBAUGH, R.W., 1975. Acid Rain: Biological Effects and Implications. Environmental Affairs 4 (4): p. 745 - 758.

(section 6. 2)

- 536 FREEDMAN, B., J.G. OGDEN, 1981. Sources and Consequences of Acid Rain in Nova Scotia. Prepared for the Nova Scotia Resources Council: 27 p.
- 515 GALLOWAY, J.N., E.B. COWLING, E. GORHAM, W.W. McFEE, 1978. A National Program for Assessing the Problem of Atmospheric Deposition (Acid Rain). A report to the Council on Environmental Quality. National Atmospheric Deposition Program NC-141, 97 p.
- 795 GIBSON, J.H., R.A. LINTHURST, 1982. Effects of acidic precipitation on the north american continent. In: Air Pollution by Nitrogen Oxides. Schneider, T. et L. Grant (eds), Amsterdam. Elsevier Scientific Publishing. p. 577 - 594.
- 673 GLASS, G.E., O.L. LOUCKS, 1980. Impact of airborne pollutants on wilderness areas along the Minnesota - Ontario border. Environmental Research Laboratory; Duluth, MN. U.S. Environmental Protection Agency. EPA-600/3-80-044. 186 p.
- 625 GLASS, N.R., 1978. Environmental effects of increased coal utilization: ecological effects of gaseous emissions from coal combustion. Corvallis Environmental Research Lab., Oregon. 1 microfiche. EPA/600/7-78/108.
- 443 GLASS, N.R., D.E. ARNOLD, J.N. GALLOWAY, G.R. HENDREY, J.J. LEE, W.W. McFEE, S.A. NORTON, C.F. POWERS, D.L. RAMBO, C.L. SCHOFIELD. 1982. Effects of acid precipitation. Environmental Science and Technology, 16(3): p. 162A - 169A.
- 116 GRAHN, O., H. HULTBERG, L. LANDNER, 1974. Oligotrophication - A Self-Accelerating Process in Lakes Subjected to Excessive Supply of Acid Substances. Ambio 3 (2): p. 93 - 94.
- 1136 GREEN, A.E.S., W.H. SMITH (éd.), 1983. Acid deposition causes and effects. A state assessment model. Proceedings of a workshop March 23-24, 1983, University of Florida, Gainesville. 316 p.
- 586 HAINES, T.A. 1981. Acidic precipitation and its consequences for aquatic ecosystems: a review. Transactions of the American Fisheries Society, 110(6): p. 669 - 707.

(section 6. 2)

- 1317 HAINES, T.A., JOHNSON, R.E., 1982. Acid rain/Fisheries. Proc. of an International Symposium on Acidic Precipitation and Fishery Impacts in Northeastern North America, American Fisheries Society, Maryland, U.S.A.. 357 p.
- 379 HAMMER, U.T., 1980. Acid Rain. The Potential for Saskatchewan. The Saskatchewan Environmental Advisory Council. 36 p.
- 1126 HARTE, J., J. HOLDREN, K. TONNESSON, 1983. The potential for acid-precipitation damage to lakes of the Sierra Nevada, California. University of California, lth, 16: p. 164 - 169.
- 380 HARVEY, H.H., 1976. Aquatic Environmental Quality: Problems and Proposals. J. Fish. Res. Board Can. 33(11): p. 2634 - 2670.
- 562 HARVEY, H.H., P.J. DILLON, J.R. KRAMER, R.C. PIERCE, D.M. WHELPALE, 1981. Acidification in the Canadian Aquatic Environment: Scientific Criteria for Assessing the Effects of acidic deposition on aquatic ecosystems. National Research Council of Canada, Associate Comomittee on Scientific Criteria for Environmental Quality, NRCC no 18475, Ottawa. 369 p.
- 445 HARVEY, H.H., R.C. PIERCE, P.J. DILLON, J.R. KRAMER, D.M. WHELPALE. 1981. Acidification dans l'environnement aquatique au Canada: Critères scientifiques pour évaluer les effets du dépôt acide sur les écosystèmes aquatiques. Conseil national de recherche du Canada, Comité associé sur les critères scientifiques concernant l'état de l'environnement. CNRC no 18476, Ottawa. 377 p.
- 744 HELVEY, J.D., S.H. KUNKLE, D.R. De WALLE, 1982. Acid precipitation: A review. Journal of Soil and Water Conservation 37(3): p. 143 - 148.
- 1238 HILEMAN, B., 1984. Acid rain perspectives: A tale of two countries. Environ. Sci. Technol. 18(11): p. 341A - 344A.
- 203 HOLT-JENSEN, A., 1973. Acid Rains in Scandinavia. Ecologist 3 (10): p. 378 - 382.
- 110 HUTCHINSON, T.C., L.M. WHITBY, 1977. The Effects of Acid Rainfall and Heavy Metal Particulates on a Boreal Forest Ecosystem near the Sudbury Smelting Region of Canada. Water, Air and Soil Pollution 7(4): p. 421 - 438.

(section 6. 2)

- 133 IASF, 1981. Acid Rain and the Atlantic Salmon. Proceedings of a Conference held November 22-23, 1980. Portland, Maine. International Atlantic Salmon Foundation Special Publication 10. 174 p.
- 1477 IHARA, R.H., 1985. An overview of the acid rain debate; politics, science and the search for consensus. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo. USA. p. 3 - 34.
- 554 INSTITUTE OF WATER RESEARCH, 1981. Initial Draft of the Proceedings for the Effects of Acid Precipitation on Ecological Systems: Great Lakes Region. April 1 - April 3, 1981. Michigan State University, East Lansing, Michigan. 520 p.
- 627 JACOFF, F.S., E. VORIS, G.M. SITEK, 1979. Energy/Environment IV: Proceedings of the 4th National conference on the Interagency energy/environment R & D Program held at Wash., D.C. on June 7-8. Automation Industries, Inc., Silver Spring, Md. 4 microfiches. EPA-600/9-79-040.
- 970 JORANGER, E., ET AL., 1980. Air and rainfall chemistry in Finnmark Norway 1976-1979 natural base water chemistry and relationship to fishing in the Jergul Norway, field research territory 1977. SNSF-project, IR 76/80. Norway. 161 p.
- 1316 KEITH, L.H., 1982. Energy and environmental chemistry - Acid rain. Vol. two, Ann Arbor Science Publishers, Michigan, 304 p.
- 766 LAST, F.T., 1982. Effects of atmospheric sulphur compounds on natural and man-made terrestrial and aquatic ecosystems. Agriculture and Environment, 7 (3-4): p. 299 - 387.
- 1324 LEFOHN, A.S., R.W. BROCKSEN, 1984. Acid rain effects research - A status report. J. Air Pollut. Control Assoc. 34(10): p. 1005 - 1013.
- 245 LIKENS, G.E., F.H. BORMANN, 1974. Acid Rain: A Serious Regional Environmental Problem. Science 184 (4142): p. 1176 - 1179.

(section 6. 2)

- 228 LOUCKS, O.L., 1980. Acid rain - Living resource implications and management needs. Transactions of the North American Wildlife and Natural Resources Conference, no. 45. Sabol. K. (ed.). Wildlife Management Institute, Washington, D.C., U.S.A. p. 24 - 37.
- 583 LOUCKS, O.L. 1981. The concern for acidic deposition in the Great Lakes Region. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 18 p.
- 277 LYNCH, J.A., E.S. CORBETT, 1980. Acid Precipitation - A threat to aquatic ecosystems. Fisheries 5 (3): p. 8 - 12.
- 1562 MARMOREK, D.R., G. CUNNINGHAM, M.L. JONES, P. BUNNELL, 1984. Smowmelt effects related to acidic precipitation: a structured review of existing knowledge and current research activities. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 117 p.
- 1561 MARMOREK, D.R., K.W. THORNTON, J.P. BAKER, D.P. BERNARD, M.L. JONES, B.S. REUBER, 1986. Acidic episodes in surface waters: the state of science. ESSA Environmental and Social Systems Analysts ltd. Vancouver, British Columbia. 243 p.
- 759 MARTIN, H.C. (ed)., 1982. Long-Range Transport of Airborne Pollutants. Water, Air, And Soil Pollution 18(1-2-3): 430 p.
- 354 MARTIN, H.C., 1979. The Environment, current stress, and a prognosis. Environment Canada, Atmospheric Environment Service: 8 p.
- 1268 MASON, J., H.M. SEIP, 1985. The current state of knowledge on acidification of surface waters and guidelines for further research. Ambio 14(1): p. 45 - 51.
- 1501 MEDINE, A., V.A. LAMARRA, 1985. Lake management. J. Water Pollut. Control Fed. 57(9): p. 965 - 972.
- 500 MULVANEY, J.N., D.W. HADDEN, 1981. The Province of Ontario, a submission to the United States Environmental Protection Agency Opposing Relaxation of SO2 Emission Limits in State Implementation Plans and Urging Enforcement. Ontario, Ministry of the Environment. 136 p.

(section 6. 2)

- 1560 NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM, 1983. Annual report 1983 to the president and congress. Executive Director - NAPAP. EOP Publications, Washington D.C. 72 p.
- 322 NAUD, L., 1979. Polluants aéroportés transfrontaliers. Relations intergouvernementales. 47 p.
- 506 ONTARIO-CANADA RESEARCH COORDINATION GROUP LRTAP, 1979. Summary of Proceedings of the Ontario-Canada Research Coordination Group LRTAP - Acidic Precipitation Seminar. September 24-47, 1979. Killarney, Ontario. 589 p.
- 492 ONTARIO. MINISTÈRE DE L'ENVIRONNEMENT. 1980. Le procès de la pluie, Rapport sur les précipitations acides et remèdes envisagés par l'Ontario. 27 p. (aussi disponible en anglais).
- 23 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1978. Extensive Monitoring of Lakes in the Greater Sudbury Area 1974-76. Sudbury Environmental Study Report. 193 p.
- 731 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. A Submission to the United States Environmental Protection Agency on Interstate Pollution. Abatement. No. A-81-09. 921 p.
- 1196 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. A submission to the United States Environmental Protection Agency opposing relaxation of SO2 emission limits in state implementation plans and urging enforcement. Toronto, Ont. 136 p.
- 79 OVERREIN, L.N., 1976. A Presentation of the Norwegian Project Acid Precipitation - Effects on Forest and Fish. Water, Air and Soil Pollution 6(2-4): p. 167 - 172.
- 96 OVERREIN, L.N., 1977. Air pollution problems, alternative solutions, and strategies. Proc. of the 32nd Annual meeting, Soil Conservation Society of America, Aug. 7-10, 1977. p. 215 - 221.
- 1053 OVERREIN, L.N., 1983. Acid precipitation - an international environmental problem. Wat. Sci. Tech. 15(12): p. 1 - 7.
- 553 OVERREIN, L.N., H.M. SEIP, A. TOLLAN, 1980. Acid precipitation - Effects on Forest and Fish. Final report of the SNSF-project 1972-1980. Research report 19/80, Oslo: 175 p.

(section 6. 2)

- 865 PATRICK, R., V.P. BINETTI, S.G. HALTERMAN, 1981. Acid lakes from natural and anthropogenic causes. Science 211: p. 446 - 448.
- 1577 PAULIN, G., 1982. Rapport des journées d'études Québec - Université Cornell sur les précipitations acides tenues à l'Université Laval les 14 et 15 janvier 1982 dans le cadre des accords Québec - New-York. Environnement Québec, 20 p.
- 701 PAULIN, G., 1982. Le Québec et le phénomène des précipitations acides, une revue. Les Carnets de Zoologie, 42(3): p. 36 - 45.
- 859 PAULIN, G., 1982. Le Québec et le phénomène des précipitations acides, une revue. Québec: Ministère de l'Environnement du Québec, Direction de la Recherche. 40 p.
- 980 PAULIN, G., 1982. Quebec and the phenomenon of acid precipitation: a review. Ministère de l'Environnement du Québec, Direction de la recherche. 33 p.
- 1135 PIERCE, R.C., D.M. WHELPDALE, M.G. SHEFFER (Eds.), 1983. Proceedings Symposium on monitoring and assessment of airborne pollutants with special emphasis on long-range transport and deposition of acidic materials and Workshop on air and precipitation monitoring networks. Ottawa, 30 August - 3 September 1982. Conseil national de recherches du Canada, NO NRCC/CNRC 20642. 502 p.
- 416 PRESTON, E.M., R.A. LEWIS (eds), 1978. The Bioenvironmental Impact of a coal-fired power plant, Colstrip, Montana. EPA-600/3-78-021, Corvallis Environmental Research Lab., Oreg. (microfiches).
- 190 QUEBEC. MINISTERE DE L'ENVIRONNEMENT. 1979. Etude écologique de la région de Rouyn - Noranda. Services de Protection de l'environnement, Bureau d'étude sur les substances toxiques, Rapport final E-17, 552 p.
- 101 QUEBEC. MINISTERE DE L'ENVIRONNEMENT, 1981. Mémoire soumis devant l'Agence de protection de l'environnement des Etats-Unis pour s'opposer au relâchement des limites d'émission de SO2 et pour inciter l'agence à faire respecter les normes en vigueur jusqu'ici. 11 septembre 1981. 50 p.

(section 6. 2)

- 698 QUEBEC. MINISTERE DE L'ENVIRONNEMENT, 1982. Rapport de l'atelier sur les précipitations acides tenu à l'institut Desjardins de Lévis, le 12 novembre 1981. Direction des communications et de l'éducation, PA-4. 165 p.
- 1308 QUEBEC. MINISTERE DE L'ENVIRONNEMENT ET NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, 1983. Rapport annuel 1982-1983. Entente Québec-New York sur les précipitations acides. 51 p.
- 1523 RECHCIGL, J.E., D.L. SPARKS, 1985. Effect of acid rain on the soil environment; a review. Commun. Soil Sci. Plant Anal. 16(7): p. 653 - 680.
- 863 REED, F.C., 1982. Acid precipitation and scientific uncertainty problems in probability. International Journal of Environment Studies 18(2): p. 77 - 84.
- 6 REED, L.E., 1976. The Long Range Transport of Air Pollutants. Ambio 5(5-6): p. 202.
- 323 RENNIE, P.J., 1978. Notes on EPRI/CERL Workshop on effects of acid precipitation. Canadian Forestry Service, Department of the Environment. 234 p.
- 351 RENNIE, P.J., 1979. Pluies acides: les dangers pouvant affecter les sols et la végétation. Service canadien des forêts, Ottawa: 11 p.
- 476 ROY, J.A., 1980. Les pluies acides sur l'Est de l'Amérique du Nord et leurs incidences au Québec. Dans: Assainissement des eaux: Défi des années '80, Assises annuelles 1980, Association québécoise des techniques de l'eau. p. 425 - 456.
- 1276 RUTHERFORD, G.K., 1984. Toxic effects of acid rain on aquatic and terrestrial ecosystems. Can. J. Physiol. Pharmacol. 62(8): p. 986 - 990.
- 1091 SAMSON, P.J., 1984. The meteorology of acid deposition: A specialty conference summary. Journal of the Air Pollution Control Association 34(1): p. 20 - 24.
- 321 SASSEVILLE, J. - L., M. LACHANCE, 1980. La qualité des eaux atmosphériques. Eau du Québec 14(1): p. 27 - 34.
- 1160 SCHMIDT, D.J., 1981. Acid Rain. 93rd meeting of the Iowa Academy of Science, Cedar Rapids, Iowa, U.S.A., April 24-25, 1981. Proc. Iowa Acad. Sci. 88(1): p. 27.

(section 6. 2)

- 972 SCHOLLE, S.R. (ed.), 1982. Northeastern Environmental Science. Acid-sensitive environments. 1(3-4): 237 p. Northeastern Science Foundation, New-York.
- 59 SHAW, R.W., 1979. Acid Precipitation in Atlantic Canada. Environmental Science & Technology 13 (4): p. 406 - 411.
- 356 SMITH, E.D., 1981. Water characteristics. J. Water Pollut. Control Fed. 53(6): p. 649 - 659.
- 755 SMITH, O.F. JR, E. SOKOL, 1982. An Assessment of acid rain and a Bibliography. Pennsylvania Environmental Council, Inc. and Pennsylvania Environmental Research Foundation, Inc., Philadelphia. 63 p.
- 462 SNSF PROJECT, 1980. Ecological Impact of Acid Precipitation. Proceedings of an international conference, D. Drablos and A. Tollan, Ed. Sandefjord, Norway, March 11-14, 1980. 383 p.
- 191 SNSF-PROJECT, 1980. The Ecological Impact of Acid Precipitation. International Conference on The Ecological Impact of Acid Precipitation, Abstracts of Voluntary contributions, vol. 1, Norway, March 11-14, 1980. 63 p.
- 192 SNSF-PROJECT, 1980. The Ecological Impact of Acid Precipitation. International Conference on the Ecological Impact of Acid Precipitation, Abstracts of Voluntary Contributions vol. 11, March 11-14, 1970. p. 64 - 149.
- 888 SOIL CONSERVATION SOCIETY OF AMERICA, 1983. Acid precipitation: A position statement. Ankeny, Iowa: Soil Conservation Society of America. 11 p.
- 1595 STOKES, P., 1988. Les polluants atmosphériques et leurs effets sur les écosystèmes aquatiques: Evaluations des besoins de recherche. Conseil des sciences du Canada. Document d'étude. 53 p.
- 696 SWEDEN. SWEDISH MINISTRY OF AGRICULTURE, 1982. Acidification today and tomorrow. Study prepared for the 1982 Stockholm Conference. 231 p.
- 412 TOLLAN, A., B. HAGERHALL, 1977. Deterioration of Water quality due to long range transport of air pollution. In: Water Development and Management, Proceedings of the United Nations Water Conference, Mar Del Plata, Argentina, March. p. 2059 - 2070.

(section 6. 2)

- 159 UNITED STATES - CANADA WORK GROUP 1, 1981. United States - Canada Memorandum of Intent on Transboundary Air Pollution. Phase II. Interim Working Paper, October 1981. 373 p.
- 760 UNITED STATES - CANADA. WORK GROUP 1, 1983. Impact Assessment. Memorandum of Intent on Transboundary Air Pollution. Accompanying maps, Final Report.
- 709 UNITED STATES GOVERNMENT, 1980. Effects of Acid Rain. Hearing before the committee on energy and natural resources United States senate ninety-sixth congress second session on the phenomenon of acid rain and its implications for a national energy policy. Publication no. 96-126, Part I, Washington, 752 p.
- 537 UNITED STATES GOVERNMENT. THE INTERAGENCY TASK FORCE ON ACID PRECIPITATION, 1981. National Acid Precipitation Assessment Plan. Draft. 129 p.
- 104 UNIVERSITY OF TORONTO, INRS-Eau, 1981. Shield Lakes Acidification Workshop. Lac Laflamme. Québec. 71 p.
- 955 VANGENECHTEN, J.H.D., 1983. Acidification in West-European lakes and physiological adaptation to acid stress in natural inhabitants of acid lakes. Water Qual. Bull. 8(3): p. 150 - 155, 169.
- 395 VIGNEAULT, Y., A. BERNIER, 1981. Les pluies acides: la problématique et les milieux cibles. Conférence présentée aux assises annuelles de l'Association Québécoise des Techniques de l'eau, Montréal, février 1981, 17 p.
- 61 VIGNEAULT, Y., DIRECTION DES EAUX INTERIEURES, ENVIRONNEMENT CANADA, 1979. Conférence prononcée le 22 novembre 1979 à l'Association québécoise des techniques de l'eau, région de la Mauricie. 24 p.
- 623 WALLSTEN, M., 1981. Changes of lakes in Uppland Central Sweden during 40 years. Acta Universitatis Upsaliensis Symbolae Botanicae Upsalienses, 23(3): 83 p.
- 1587 WENBLAD, A., 1987. Effects of acidification on fish in Scandinavia: an overview. National Water Research Institute. Water Quality Bulletin. 12(4): p. 149 - 153.
- 1305 WETZEL, R.G., 1984. Acidification and the future. Vatten 40: p. 289 - 293.

(section 6. 2)

- 391 WILLEN, T., 1972. The Gradual Destruction of Sweden's Lakes. Ambio 1(1): p. 6 - 14.
- 953 WRIGHT, R.F., 1983. Acidification of freshwaters in Europe. Water qual. Bull. 8(3): p. 137 - 142, 168.
- 403 YAN, N.D., 1978. Acid precipitation: a review. Department of Botany, University of Toronto. Publ. EE: 9, 66 p.

### 6. 3 Aspects politiques et législatifs

- 471 ADIRONDACK PARK AGENCY, 1975. Statement of the Adirondack Park Agency on Acid Precipitation and its Effect on the Adirondack Park. 4 p.
- 150 AHERN, A., 1981. Les biologistes, les pluies acides et le Québec. Texte présenté au sous-comité fédéral sur les pluies acides du comité permanent des pêches et des forêts. Montréal. 11 p.
- 451 ANONYME, 1976. Acid-Rain Impacts. SFI Bulletin, (271): p. 2 - 4.
- 624 AVERY, M., R.K. SCHREIDER, 1979. The clean air act: its relation to fish and wildlife resources. Topical briefs: fish and wildlife resources and electric power generation, no 8. National Power Plant Team, Ann Arbor, Michigan. 1 microfiche.
- 596 BEAMISH, R.J., 1976. Acidification of Lakes in Canada by Acid Precipitation and the Resulting Effects on Fishes. Water, Air, and Soil Pollution 6: p. 501 - 514.
- 902 BORMANN, F.H., 1982. The New England landscape: air pollution stress and energy policy. Ambio 11(4): p. 188 - 194.
- 1144 BROWN, W.Y., 1982. Why government must intervene in wildlife conservation. The Environmental Professional, 4(4): p. 337 - 339.
- 906 CAMERON, F.X., 1982. International cooperation and acid rain pollution: establishing the framework for control. International Journal of Environmental Studies 18(2): p. 129 - 134.
- 234 CANADA. ENVIRONMENT CANADA. 1979. Environmental Management in the 1980'S. A "Futures" Report. Program Development Directorate, Environmental Management Service. p. 36 - 41.
- 614 CANADA. ENVIRONNEMENT CANADA, 1981. La loi sur la lutte contre la pollution atmosphérique - Compilation des règlements et lignes directrices. Service de la protection de l'environnement, Direction générale de l'assainissement de l'air. Rapport EPS 1-AP-81-1. 100 p.

(section 6. 3)

- 1586 CANADA. MINISTRE DE L'ENVIRONNEMENT, 1987. Notes pour une allocution de l'honorable Tom McMillan, C.P., député devant la National Conservation and Parks Association, National Press Club, Washington, D.C. Canada, Ministre de l'Environnement, discours du 28 septembre 1987. 14 p.
- 485 CANADA. ETATS-UNIS. 1980. Memorandum déclaratif d'intention entre le gouvernement du Canada et le gouvernement des Etats-Unis d'Amérique concernant la pollution atmosphérique transfrontière. 6 p.
- 507 CANADA. SOUS-COMITE SUR LES PLUIES ACIDES. 1980-81. Procès verbaux et témoignages du Sous-comité sur les Pluies acides du Comité permanent des pêches et forêts. Fascicules no 1 à 7, Chambre des Communes, Première session de la trente-deuxième législature. 722 p.
- 333 CANADA. UNITED STATES LAW INSTITUTE, 1982. Proceedings. The Transnational Implications of Acid Rain. Canada - United States Law Journal, Vol. 5, 1982, Cleveland, Ohio, 124 p.
- 1442 CARROLL, J.E., 1985. Acid rain - acid diplomacy. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West view press, Boulder, Colo. USA. p.261 - 273.
- 542 CARTER, L.J. 1979. Uncontrolled SO2 emissions bring acid rain. Science, 204: p. 1179 - 1181.
- 611 CHARTRAND, L., 1982. Rouyn: vite un miracle !. Québec Science, 20(9): p. 34 - 41.
- 612 DELISLE, A., 1982. Le réveil acide du Québec. Québec Science, 20(9): p. 28 - 32.
- 616 DELISLE, A., 1982. Six acteurs en quête d'un scénario. Compterendu d'une table ronde organisée par Québec Science sur la question des pluies acides, le 19 février 1982. Québec Science, 20(9): p. 56 - 60.
- 1615 ELLIS, J.H., 1988. Acid rain control strategies. Environ. Sci. Technol. 22(11): p. 1248 - 1255.
- 655 FARBER, P.S. (ed.), 1980. Acid rain: an international concern. J. Air Pollut. Control Assoc. 30(10): p. 1089 - 1097.

(section 6. 3)

- 752 FISCHER, J.M., 1981. The availability of private remedies for acid rain damage. Ecology Law Quarterly, 9(3): p. 429 - 487.
- 642 GALLOGLY, M.R., 1981. Acid precipitation: can the clean air act handle it ?. Boston College Environ. Aff. Law Rev., 9(3): p. 687 - 744.
- 1460 GIBIAN, G.P., 1985. Predicting deposition reductions using long-range transport models; some policy implications. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 137 - 172.
- 806 GIBSON, R., 1983. Acid rain as a political dilemma. Alternatives, 11(2): p. 3 - 8.
- 1464 GOULD, R.R., 1985. Envoy's comments fuel speculation on acid rain. Chem. Ind. 21: p. 711 - 712.
- 374 HERZBERG, P.J., 1980. The Interstate Carriage of Pollutants: The Legal Problem and Existing Solutions. In: Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, May 21-23 1979: p. 463 - 475.
- 1404 HOYTE, J.S., 1984. Fisheries and wildlife management in an urbanizing state. Sabol, K. (ed.). Trans. N. Am. Wildl. Nat. Res. Conf., March 23-28, 1984, 49: p. 23 - 27.
- 133 IASF, 1981. Acid Rain and the Atlantic Salmon. Proceedings of a Conference held November 22-23, 1980. Portland, Maine. International Atlantic Salmon Foundation Special Publication 10. 174 p.
- 1477 IHARA, R.H., 1985. An overview of the acid rain debate; politics, science and the search for consensus. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo. USA. p. 3 - 34.
- 834 KRAUS, J., 1983. Legal approaches to the control of acid rain. Alternatives 11(2): p. 25 - 34.
- 472 LA BASTILLE, A., 1979. Report on Acid Precipitation. Adirondack Park Agency: 6 p.

(section 6. 3)

- 314 LUNDQVIST, L.J., 1979. Who is Winning the Race for Clean Air? An Evaluation of the Impacts of the U.S. and Swedish Approaches to Air Pollution Control. *Ambio* 8 (4): p. 144 - 151.
- 692 MUNTON, D., 1981. Acid rain and basic politics. *Alternatives* 10(1): p. 21 - 28.
- 878 MUNTON, D., 1983. Life, liberty and the american pursuit of acid rain. *Alternatives*, 11(2): p. 13 - 20.
- 1196 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. A submission to the United States Environmental Protection Agency opposing relaxation of SO2 emission limits in state implementation plans and urging enforcement. Toronto, Ont. 136 p.
- 872 PAEHKLE, R., 1983. The politics of acid rain. *Alternatives* 11(2): p. 35 - 38.
- 1514 PARKER, L.B., J.E., BLODGETT, 1985. Acid rain legislation and the clean air act; time to raise the bridge or lower the river? In: *The acid rain debate; scientific, economic, and political dimensions.* Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 107 - 136.
- 1308 QUEBEC, MINISTERE DE L'ENVIRONNEMENT ET NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, 1983. Rapport annuel 1982-1983. Entente Québec-New York sur les précipitations acides. 51 p.
- 1525 REGENS, J.L., R.W. RYCROFT, 1985. Perspective on acid deposition control; science, economics and policy-making. In: *The acid rain debate; scientific, economic, and political dimensions.* Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 87 - 106.
- 521 ROBINSON, R.M., 1980. Acid Rain - The Crossroads for Decision Making. *Journal of the Air Pollution Control Association*, 30(2): p. 106, 108.
- 615 ROGEL, J.P., 1982. Suède: la dépollution tranquille. *Québec Science*, 20(9): p. 46 - 53.
- 49 ROSENCRANZ, A., 1980. The Problem of Transboundary Pollution. *Environment* 22(5): p. 15 - 20.

(section 6. 3)

- 653 ROSENCRANZ, A., G. WETSTONE, 1980. Acid precipitation: National and international responses. Environment 22(5): p. 6 - 20.
- 661 SMITH, R.J., 1981. Acid rain bills reflect regional dispute. Science 214: p. 770 - 771.
- 662 SMITH, R.J., 1981. Administration views on acid rain assailed. Science 214: p. 38.
- 1542 STAFFORD, R.T., 1985. Status of programs and future directions for maintaining air and water quality. In: Taking stock; resource management in the 50th year. Sabol, K. (ed.). Trans. of the fiftieth North American Wildlife and Natural Resources Conference, Washington, D.C., USA, March 15-20, 1985. p. 72 - 77.
- 1595 STOKES, P., 1988. Les polluants atmosphériques et leurs effets sur les écosystèmes aquatiques: Evaluations des besoins de recherche. Conseil des sciences du Canada. Document d'étude. 53 p.
- 122 STOP, 1981. Brief to House of Commons Sub-Committee on Acid Rain. 27 p.
- 1544 STREETS, D.G., 1985. The design of cost-effective strategies to control acidic deposition. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 173 - 218.
- 695 SWEDEN. SWEDISH MINISTRY OF AGRICULTURE, 1982. The 1982 Stockholm Conference on Acidification of the Environment. Report. Stockholm, June 28-30, 1982. 53 p.
- 537 THE INTERAGENCY TASK FORCE ON ACID PRECIPITATION, 1981. National Acid Precipitation Assessment Plan. Draft, USA: 129 p.
- 709 UNITED STATES GOVERNMENT, 1980. Effects of Acid Rain. Hearing before the committee on energy and natural resources United States senate ninety-sixth congress second session on the phenomenon of acid rain and its implications for a national energy policy. Publication no. 96-126, Part I, Washington, USA. 752 p.

(section 6. 3)

- 710 UNITED STATES GOVERNMENT, 1981. Effects of Acid Rain. Hearing before the subcommittee on energy conservation and supply of the committee on energy and natural resources United States senate. Publication no. 96-126, Part 2, Washington, USA. 121 p.
- 1554 WEBBER, D.J., 1985. Equitability reducing transboundary causes of acid rain; an economic incentive regulatory approach. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 219 - 238.
- 48 WETSTONE, G.S., 1980. The Need for a New Regulatory Approach. Environment. 22(5): p. 9 - 14, 40 - 41.
- 1039 WETSTONE, G.S., 1984. National recourses for international pollution: towards a United States, Canada solution. J. Air Pollut. Control Assoc. 34(2): p. 111 - 118.
- 1556 WILK, I.J., 1985. Responsibilities of scientists examination of the acid precipitation problem. Sci. Total Environ. 44(3): p. 293 - 300.
- 1558 YANARELLA, E.J., 1985. Environment vs. ecological perspectives on acid rain; the american environmental movement and the West German Green Party. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA, p. 219 - 238.

#### 6. 4 Aspects socio-économiques

- 1418 ANDELMAN, J.B., J.R. MILLER. 1986. Les effets des précipitations acides sur les composés d'aluminium dans les cours d'eau. Bulletin de la Qualité des Eaux, Environnement Canada, 11(1): p. 21 - 27.
- 451 ANONYME, 1976. Acid-Rain Impacts. SFI Bulletin, (271): p. 2 - 4.
- 638 BARNES, J., H. DUNN, G. SCHULER, 1980. Air monitoring and health data needed in Southern Indiana. Proceedings of the Indiana Academy of Science, 89: p. 236 - 245.
- 1287 BENNETT, B.G., 1985. Modeling exposure routes to man of trace metals associated with acid precipitation. Environ. Health Perspect. 63: p. 89 - 92.
- 573 BLAKE, L.M. 1981. Liming acid ponds in New-York. New-York Fish and Game Journal, 28(2): p. 208 - 214.
- 903 BORMANN, F.H., 1982. The effects of air pollution on the New England landscape. Ambio 11(6): p. 338 - 346.
- 902 BORMANN, F.H., 1982. The New England landscape: air pollution stress and energy policy. Ambio 11(4): p. 188 - 194.
- 1144 BROWN, W.Y., 1982. Why government must intervene in wildlife conservation. The Environmental Professional, 4(4): p. 337 - 339.
- 849 CAMUFFO, D. 1982. Wetting, deterioration and visual features of stone surfaces in an urban area. Atmospheric Environment 16(9): p. 2253 - 2259.
- 1200 CANADA. ENVIRONNEMENT CANADA, 1984. Limitation des émissions atmosphériques polluantes: Véhicules légers. Rapport SPE 2/TS/4, Service de la protection de l'environnement. 42 p.
- 1583 CANADA. SOUS-COMITE MINISTERIEL SUR LES PLUIES ACIDES, 1981. Les eaux sournaises: la tragique réalité des pluies acides - Les aspects économiques des pluies acides. Dans: Les eaux sournaises - la tragique réalité des pluies acides. Sous-comité ministériel sur les pluies acides. Chambre des communes. Ministère des approvisionnement et services. p. 115 - 126.

(section 6. 4)

- 507 CANADA. SOUS-COMITE SUR LES PLUIES ACIDES. 1980-81. Procès verbaux et témoignages du Sous-comité sur les Pluies acides du Comité permanent des pêches et forêts. Fascicules no 1 à 7, Chambre des Communes, Première session de la trente-deuxième législature. 722 p.
- 333 CANADA - UNITED STATES LAW INSTITUTE, 1982. Proceedings. The transnational implications of acid rain. Canada - United States Law Journal, Vol. 5, 1982, Cleveland, Ohio, 124 p.
- 907 CARROLL, J., 1983. Acid rain diplomacy: the need for a bilateral resolution. Alternatives 11(2): p. 9 - 12.
- 1442 CARROLL, J.E., 1985. Acid rain - acid diplomacy. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West view press, Boulder, Colo. USA. p.261 - 273.
- 542 CARTER, L.J. 1979. Uncontrolled SO2 emissions bring acid rain. Science, 204: p. 1179 - 1181.
- 611 CHARTRAND, L., 1982. Rouyn: vite un miracle !. Québec Science, 20(9): p. 34 - 41.
- 8 COFFIN, D.L., J.H. KNELSON, 1976. Acid Precipitation: Effects of Sulfur Dioxide and Sulfate Aerosol Particles on Human Health. Ambio 5 (5-6): p. 239 - 242.
- 656 CROCKER, T.D., B.A. FORSTER, 1981. Decision problems in the control of acid precipitation: nonconvexities and irreversibilities. Journal of the Air Pollution Control Association 31(1): p. 31 - 37.
- 612 DELISLE, A., 1982. Le réveil acide du Québec. Québec Science, 20(9): p. 28 - 32.
- 616 DELISLE, A., 1982. Six acteurs en quête d'un scénario. Compterendu d'une table ronde organisée par Québec Science sur la question des pluies acides, le 19 février 1982. Québec Science, 20(9): p. 56 - 60.
- 764 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3B, 1982. Evaluation des techniques, coûts et émissions. Rapport final, soumis conformément au Mémorandum déclaratif d'intention concernant la pollution atmosphérique transfrontière. 446 p.

(section 6. 4)

- 655 FARBER, P.S. (ed.), 1980. Acid rain: an international concern. J. Air Pollut. Control Assoc. 30(10): p. 1089 - 1097.
- 1360 FERRIS, B.G. JR, J.D. SPENGLER, 1985. Problems in the estimation of human exposure to components of acid precipitation precursors. Environ. Health Perspect. 63: p. 5 - 10.
- 1361 FRANKLIN, C.A., R.T. BURNETT, R.J.P. PAOLINI, M.E. RAIZENNE, 1985. Health risks from acid rain; a canadian perspective. Environ. Health Pespect. 63: p. 155 - 168.
- 749 FRANKLIN, M., 1981. Commentary some future environmental problems. J. Great Lakes Res. 7(4): p. 486 - 490.
- 642 GALLOGLY, M.R., 1981. Acid precipitation: can the clean air act handle it ?. Boston College Environ. Aff. Law Rev. 9(3): p. 687 - 744.
- 806 GIBSON, R., 1983. Acid rain as a political dilemma. Alternatives, 11(2): p. 3 - 8.
- 1464 GOULD, R.R., 1985. Envoy's comments fuel speculation on acid rain. Chem. Ind. 21: p. 711 - 712.
- 1465 GOYER, R.A., J. BACHMANN, T.W. CLARKSON, B.G. FERRIS JR, J. GRAHAM, P. MUSHAK, D.P. PERL, D.P. RALL, R. SCHLESINGER, ET AL., 1985. Potential human health effects of acid rain; report of a workshop. Environ. Health Perspect. 60: p. 355 - 368.
- 1364 HACKNEY, J.D., W.S. LINN, E.L. AVOL, 1985. Potential risks to human respiratory health from acid fog; evidence from experimental studies of volunteers. Environ. Health Perspect. 63: p. 57 - 62.
- 793 HILEMAN, B., 1983. Acid fog. Environment Science and Technology, 17(3): p. 117A - 120A.
- 1404 HOYTE, J.S., 1984. Fisheries and wildlife management in an urbanizing state. Sabol, K. (ed.), Trans. N. Am. Wildl. Nat. Res. Conf., March 23-28, 1984, 49: p. 23 - 27.
- 815 HULM, P., 1983. A dark decade ahead for acid rain ?. Ambio 12(2): p. 131.

(section 6. 4)

- 133 IASF, 1981. Acid Rain and the Atlantic Salmon. Proceedings of a Conference held November 22-23, 1980. Portland, Maine. International Atlantic Salmon Foundation Special Publication 10. 174 p.
- 1477 IHARA, R.H., 1985. An overview of the acid rain debate; politics, science and the search for consensus. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo. USA. p. 3 - 34.
- 355 INCO LIMITED, 1980. The Containment of Sulphur Dioxide Emissions at Inco's Sudbury Operations. 9 p.
- 367 JAHNIG, C.E., H. SHAW, 1981. A comparative Assessment of Flue Gas Treatment Processes Part II - Environmental and Cost Comparison. J. Air Pollut. Control Assoc. 31(5): p. 596 - 604.
- 13 KNABE, W., 1976. Effects of Sulfur Dioxide on Terrestrial Vegetation. Ambio 5(5-6): p. 213 - 218.
- 15 KUCERA, V., 1976. Effects of Sulfur Dioxide and Acid Precipitation on Metals and Anti-Rust Painted Steel. Ambio 5 (5-6): p. 243 - 248.
- 472 LA BASTILLE, A., 1979. Report on Acid Precipitation. Adirondack Park Agency: 6 p.
- 1369 LIPPMANN, M., 1985. Airborne acidity estimates of exposure and human health effects. Environ. Health Perspect. 63: p. 63 - 70.
- 314 LUNDQVIST, L.J., 1979. Who is Winning the Race for Clean Air? An Evaluation of the Impacts of the U.S. and Swedish Approaches to Air Pollution Control. Ambio 8 (4): p. 144 - 151.
- 1497 MARIER, J.R., 1985. Interrelations between magnesium and some trace elements in soil and water with regard to disease processes. J. Am. Coll. Nutr. 4(3): p. 334.
- 1370 MARTONEN, T.B., A.E. BARNETT, F.J. MILLER, 1985. Ambient sulfate aerosol deposition in man; modeling the influence of hygroscopicity. Environ. Health Perspect. 63: p. 11 - 24.
- 1500 MCDONALD, M.E., 1985. Acid deposition and drinking water. Environ. Sci. Technol. 19(9): p. 772 - 776.

(section 6. 4)

- 1100 MERANGER, J.C., T.R. KHAN, C. VAIRO, R. JACKSON, WAN CHI LI, 1983. Lake water acidity and the quality of pumped cottage water in selected areas of Northern Ontario. Intern. J. Environ. Anal. Chem. 15(3): p. 185 - 212.
- 1207 MHG INTERNATIONAL LTD, 1983. Air pollution abatement study for petroleum refineries. DSS file no: 53SS. KE 145-2-0731, pour Environnement Canada, Service de la protection de l'environnement. 129 p.
- 1208 MHG INTERNATIONAL LTD, 1983. Study on petroleum fuel desulfurization in the petroleum industry. Volumes 1 and 2. DSS file 53SS. KE 145-2-0734, pour Environnement Canada, Service de la protection de l'environnement. 286 p.
- 1371 MOORE, M.R., 1985. Influence of acid rain upon water plumbosolvency. Environ. Health Perspect. 63: p. 121 - 126.
- 1504 MORRISON, M.B., E.S. RUBIN, 1985. A linear programming model for acid rain policy analysis. J. Air Pollut. Control Assoc. 36(11): p. 1137 - 1148.
- 1372 MOTTET, N.K., C.-M. SHAW, T.M. BURBACHER, 1985. Health risks from increases in methylmercury exposure. Environ. Health Perspect. 63: p. 133 - 140.
- 878 MUNTUN, D., 1983. Life, liberty and the american pursuit of acid rain. Alternatives, 11(2): p. 13 - 20.
- 1373 MUSHAK, P., 1985. Potential impact of acid precipitation on arsenic and selenium. Environ. Health Perspect. 63: p. 105 - 114.
- 1374 NORDBERG, G.F., R.A. GOYER, T.W. CLARKSON, 1985. Impact of effects of acid precipitation on toxicity of metals. Environ. Health Perspect. 63: p. 169 - 180.
- 1375 OZKAYNAK, H., J.D. SPENGLER, 1985. Analysis of health effects resulting from population exposures to acid precipitation precursors. Environ. Health Perspect. 63: p. 45 - 56.
- 872 PAEHKLE, R., 1983. The politics of acid rain. Alternatives 11(2): p. 35 - 38.

(section 6. 4)

- 1514 PARKER, L.B., J.E., BLODGETT, 1985. Acid rain legislation and the clean air act; time to raise the bridge or lower the river? In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 107 - 136.
- 1376 PERL, D.P., 1985. Relationship of aluminum to Alzheimer's disease. Environ. Health Perspect. 63: p. 149 - 154.
- 1378 PISCADOR, M., 1985. Dietary exposure to cadmium and health effects impact of environmental changes. Environ. Health Perspect. 63: p. 127 - 132.
- 779 POLAK, J.C., 1982. Motor vehicle NOx - The canadian situation. In: Schneider, T. et L. Grant (Eds). Air Pollution by Nitrogen Oxides, Amsterdam: Elsevier Scientific Publishing, p. 915 - 919.
- 1195 POSTEL, S., 1984. Les forêts dans un monde de combustibles fossiles. Etude numéro 58 de l'Institut de prospective mondiale (trad. de l'ang.: Forests in a fossil fuel world, Worldwatch Paper 58). 41 p.
- 895 PUDLIS, E., 1982. Poland's plight: environment damaged from air pollution and acid rain. Ambio, 12(2): p. 125 - 127.
- 676 QUEBEC. MINISTERE DE L'ENVIRONNEMENT, 1982. Evaluation des dommages socio-économiques potentiels causés par les précipitations acides sur la pêche sportive au Québec. Rapport rédigé par ECONOSULT (Lavalin). 131 p.
- 1308 QUEBEC. MINISTERE DE L'ENVIRONNEMENT ET NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, 1983. Rapport annuel 1982-1983. Entente Québec-New York sur les précipitations acides. 51 p.
- 863 REED, F.C., 1982. Acid precipitation and scientific uncertainty problems in probability. International Journal of Environment Studies 18(2): p. 77 - 84.
- 1101 REED, J.S., J.C. HENNINGSON, 1984. Acid precipitation and drinking water supplies. J. Am. Water Works Assoc. 76(3): p. 60 - 65.

(section 6. 4)

- 1525 REGENS, J.L., R.W. RYCROFT, 1985. Perspective on acid deposition control; science, economics and policy-making. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 87 - 106.
- 1529 ROEDER, P.W., T.P. JOHNSON, 1985. Public opinion and the environment; the problem of acid rain. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 57 - 80.
- 615 ROGEL, J.P., 1982. Suède: la dépollution tranquille. Québec Science, 20(9): p. 46 - 53.
- 1387 SCHLESINGER, R.B., 1985. Effects of inhaled acids on respiratory tract defense machanisms. Environ. Health Perspect. 63: p. 25 - 38.
- 1158 SCHOLLE, S.R., 1983. Overview of materials damage from acid deposition. Northeastern Environmental Science 2(3-4): p. 133 - 140.
- 1380 SHARPE, W.E., D.R. DEWALLE, 1985. Potential health implications for acid precipitation, corrosion, and metal contamination of drinking water. Environ. Health Perspect. 63: p. 71 - 78.
- 584 SHARPE, W.E., E.S. YOUNG. 1981. The effects of acid precipitation on water quality in roof catchment-cistern water supplies. Presented at the Conference on the effects of acid precipitation on ecological systems: Great Lakes Region, March 31 - April 3, 1981. Michigan State University, Michigan. 24 p.
- 937 SILVERMAN, B.G., 1982. Acid rain and a comparative analysis of two large-scale electric utility models. Journal of the Air Pollution Control Association 32(10): p. 1031 - 1042.
- 1162 SITWELL, N., 1984. Our trees are dying. Science Digest, Sept. 84. p. 39 - 48, 96.
- 661 SMITH, R.J., 1981. Acid rain bills reflect regional dispute. Science 214: p. 770 - 771.
- 662 SMITH, R.J., 1981. Administration views on acid rain assailed. Science 214: p. 38.

(section 6. 4)

- 781 SMITH, R.L., 1981. Energy and The Environment. In: Energy, Environment and the Economy. Majumdar, S.K. (ed). The Pennsylvania Academy of Science, Easton, Pa. p. 47 - 61.
- 1544 STREETS, D.G., 1985. The design of cost-effective strategies to control acidic deposition. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 173 - 218.
- 1548 TAYLOR, F., J.A. MATERA, T.C. CRUSBERG, R.D. CHEETHAM, A.H. HOFFMAN, 1985. Acid precipitation and drinking water quality in the eastern United States. Water Qual. Public Health, Proc. of a Conf., 1984. p. 11 - 17.
- 807 TORRIE, R., 1983. Acid rain: The implications for energy policy. Alternatives, 11(2): p. 40 - 48.
- 709 UNITED STATES GOVERNMENT, 1980. Effects of Acid Rain. Hearing before the committee on energy and natural resources United States senate ninety-sixth congress second session on the phenomenon of acid rain and its implications for a national energy policy. Publication no. 96-126, Part I, Washington, 752 p.
- 710 UNITED STATES GOVERNMENT, 1981. Effects of Acid Rain. Hearing before the subcommittee on energy conservation and supply of the committee on energy and natural resources United States senate. Publication no. 96-126, Part 2, Washington, 121 p.
- 1382 UTELL, M.J., 1985. Effects of inhaled acid aerosols on lung mechanics; an analysis of human exposure studies. Environ. Health Perspect. 63: p. 39 - 44.
- 1554 WEBBER, D.J., 1985. Equitability reducing transboundary causes of acid rain; an economic incentive regulatory approach. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.). West View Press, Boulder, Colo., USA. p. 219 - 238.
- 812 WELLER, P., 1983. Industry and acid rain: The canadian corporate response. Alternatives, 11(2): p. 21 - 24.
- 1305 WETZEL, R.G., 1984. Acidification and the future. Vatten 40: p. 289 - 293.

(section 6. 4)

- 1556 WILK, I.J., 1985. Responsibilities of scientists examination of the acid precipitation problem. Sci. Total Environ. 44(3): p. 293 - 300.
- 1386 WILLS, M.R., J. SAVORY, 1985. Water content of aluminum, dialysis Dementia, and Osteomalacia. Environ. Health Perspect. 63: p. 141 - 148.
- 1384 WOOD, J.M., 1985. Effects of acidification on the mobility of metals and metalloids; an overview. Environ. Health Perspect. 63: p. 115 - 120.
- 1558 YANARELLA, E.J., 1985. Environment vs. ecological perspectives on acid rain; the american environmental movement and the West German Green Party. In: The acid rain debate; scientific, economic, and political dimensions. Yanarella, E.J. and R.H. Ihara (ed.), West View Press, Boulder, Colo., USA. p. 219 - 238.
- 1154 YOUNG, Jr. E.S., W.E. SHARPE, 1984. Atmospheric deposition and roof-catchment cistern water quality. J. Environ. Qual. 13(1): p. 38 - 43.

## 6. 5 Bibliographies

- 711 BITUMINOUS COAL RESEARCH INC., 1980. Reference Bibliography on "Acid" Rain. 67 p.
- 787 BROWNE, F.X., J.B. ORR, T.J. GRIZZARD, B.L. WEAND, 1982. Nonpoint sources. Journal of Water Pollution Control Federation, 54(6): p. 755 - 763.
- 1307 CANADA, ENVIRONNEMENT CANADA, 1985. Transport à grande distance des polluants atmosphériques: Bibliographie 1980-1984. Service de la conservation de l'environnement. TGDPA no. 1: 27 p.
- 250 CANADA, ENVIRONNEMENT CANADA - ENVIRONNEMENT ONTARIO, 1981. A Bibliography. The Long-Range Transport of Air Pollutants and Acidic Precipitation. Supplement. LRTAP Program. 52 p.
- 249 CANADA, ENVIRONNEMENT-CANADA - ENVIRONNEMENT ONTARIO, 1980. A Bibliography. The Long-Range Transport of Air Pollutants and Acidic Precipitation. LRTAP Program Office: 95 p.
- 556 DAYE. P.G., 1980. Effects of Ambient pH on Fish: An Annotated Bibliography. Canadian Tech. Report of Fisheries and Aquatic Sciences no. 950, St-Andrews, N.B.: 28 p.
- 1259 DELISLE, C.E., L. ROY-ARCAND, M.A. BOUCHARD, 1985. Effets des précipitations acides sur les divers écosystèmes: Synthèse bibliographique. Ecole Polytechnique, Université de Montréal; Environnement Canada, Service de la protection de l'environnement; La Fondation canadienne Donner. 307 p.
- 574 DYNAMAC CORPORATION. 1982. Bibliography on air pollution acid rain, and effects on fish, wildlife, and their habitats. Rockville, Maryland. 128 p.
- 83 FOWLE, C.D., R.K. BAEHRE, 1979. A Bibliography on Acid Rain. Prepared for the Action Seminar on Acid Precipitation (ASAP), Toronto. 27 p.
- 744 HELVEY, J.D., S.H. KUNKLE, D.R. De WALLE, 1982. Acid precipitation: A review. Journal of Soil and Water Conservation 37(3): p. 143 - 148.

(section 6. 5)

- 1469 HENDERSON, A., 1985. Literature on air pollution and lichens XXII. Lichenologist 17(2): p. 213 - 219.
- 706 ONTARIO. MINISTRY OF THE ENVIRONMENT, 1981. Acidic precipitation in Ontario study, An Annotated bibliography, Terrestrial effects of acidic precipitation. APIOS report no. 003/81. 181 p.
- 755 SMITH, Jr., O.F. and E. SOKOL, 1982. An Assessment of acid rain and a Bibliography. Pennsylvania Environmental Council, Inc. and Pennsylvania Environmental Research Foundation, Inc., Philadelphia. 63 p.
- 590 SNSF-PROJECT, 1978. Annotated Bibliography 1974-1977, Acid Precipitation - Effects on Forest and Fish. SNSF, A. Tollan (ed.). 39 p.
- 591 SNSF-PROJECT, 1979. Annotated Bibliography Supplement Acid Precipitation - Effects on Forest and Fish. SNSF, A. Tollan (ed.), Oslo. 13 p.
- 1014 THE ACID RAIN FOUNDATION INC., 1983. Acid Rain, Resources Directory. Saint-Paul, Minnesota. 64 p.
- 103 TOLLAN, A., 1981. Annotated bibliography 1974-1980. SNSF project. Oslo. 42 p.
- 707 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1982. An Acid Rain Bibliography. Corvallis Environmental Research Laboratory, Corvallis, Oregon, Volume I: Entries 1-1554.
- 708 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1982. An Acid Rain Bibliography. Corvallis Environmental Research Laboratory, Corvallis, Oregon, Volume II: Entries 1554-4000.
- 67 UNIVERSITY OF CENTRAL FLORIDA LIBRARY, 1980. Acid Rain. An Annotated Bibliography of Selected References, library bibliography series no. 8, 12 p.
- 1119 WESTERN AQUATICS INC., 1983. An assessment of the relationship among acidifying depositions, surface water acidification, and fish populations in North America. EPRI-EA-3127-Vol.2 Bibliography. Research project 1910-2. 283 p.
- 30 WRIGHT, R.F. Acid Precipitation and its Effects on Fresh-water Ecosystems: an Annotated Bibliography. SNSF-Project: p. 619 - 678.

## 6. 6 Programmes d'activité

- 675 BROUILLETTE, J., 1982. Précipitations acides: Répertoire des intervenants du Québec. Première édition. Ministère de l'Environnement du Québec, Direction générale des inventaires et de la recherche. 36 p.
- 700 BROUILLETTE, J., 1982. Activités de recherche sur le TGDPA et les précipitations acides en cours de réalisation dans la province de Québec. Ministère de l'Environnement du Québec, Direction de la recherche, document provisoire. 54 p.
- 448 CANADA. ENVIRONNEMENT CANADA. 1980. Programme national d'étude du transport à grande distance des polluants atmosphériques. Bulletin du PETGDPA, Déc. 1980. 21 p.
- 505 CANADA. ENVIRONNEMENT CANADA. 1981. Catalogue des activités de recherche au Canada sur le transport à grande distance des polluants atmosphériques et les précipitations acides. Bureau fédéral de liaison du PETDGPA, Service de l'Environnement atmosphérique. 375 p.
- 552 CANADA. ENVIRONNEMENT CANADA, 1981. Le bassin jaugé du lac Laflamme. Synthèse des travaux. Direction générale des eaux intérieures, Région du Québec: 8 p.
- 162 CANADA. ENVIRONNEMENT CANADA, 1981. Rapport annuel 1979-1980. Direction de la recherche sur la qualité de l'air et sur l'interaction des milieux, Environnement atmosphérique. 42 p.
- 633 CANADA. ENVIRONNEMENT CANADA, 1981. Un programme national pour l'étude du transport à grande distance des polluants atmosphériques. Bulletin du TGDPA, Juillet 1981. 15 p.
- 622 CANADA. ENVIRONNEMENT CANADA, 1982. Un programme national pour l'étude du transport à grande distance des polluants atmosphériques. Bulletin du TGDPA, Printemps 1982. 20 p.
- 728 CANADA. ENVIRONNEMENT CANADA, 1982. Le bassin jaugé du lac Laflamme. Synthèse des travaux. Direction générale des eaux intérieures, région du Québec. (Préliminaire). 54 p.

(section 6. 6)

- 1026 CANADA. ENVIRONNEMENT CANADA, 1983. Catalogue des activités de recherche au Canada sur le transport à grande distance des polluants atmosphériques et les précipitations acides. Bureau fédéral de liaison du PETGDPA, Service de l'environnement atmosphériques. 444 p.
- 1306 CANADA, ENVIRONNEMENT CANADA, 1985. Un programme national pour l'étude du transport à grande distance des polluants atmosphériques. Bulletin du TGDPA. Juin 1985. 12p.
- 1309 CANADA, ENVIRONNEMENT CANADA, 1985. Long range transport of air pollutants: 1984/85 annual report. Inland Waters Directorate, Environmental Conservation Service. 58 p.
- 335 DEPARTMENT OF FISHERIES AND OCEANS, 1982. National Program Plan for Studies on Acid Rain 1981/82. Acid Rain Program, Burlington, Ont. 164 p.
- 1622 ELDER, F.C., 1987. Long range transport of airborne pollutants: 1986/87 annual report. Environnement Canada, Conservation and Protection, August 1987. 82 p.
- 501 ETATS-UNIS - CANADA. GROUPE DE TRAVAIL 3A, 1981. Elaboration et application des stratégies. Rapport provisoire Etats-Unis - Canada, Mémoire déclaratif d'intention concernant la pollution atmosphérique transfrontière: 60 p. (Version anglaise disponible)
- 515 GALLOWAY, J.N., E.B. COWLING, E. GORHAM, W.W. McFEE, 1978. A National Program for Assessing the Problem of Atmospheric Deposition (Acid Rain). A report to the Council on Environmental Quality. National Atmospheric Deposition Program NC-141, 97 p.
- 1580 GORHAM, E., 1979. Acid rain and lakes - A recommended program of research. In: Proceedings of the action seminar on acid precipitation. ASAP Coordinating Committee, Toronto, Ontario. p. 65 - 69.
- 721 KERKES, J. (ed), 1982. Kejimikujik calibrated catchments program on the aquatic and terrestrial effects of the long-range transport of air pollutants. Report of the proceedings, November 18, 1981, Atlantic Region LRTAP Monitoring and Effects Working Group. 75 p.
- 470 LA BASTILLE, A., 1980. Summary and Review of 1979-80 Research Programs and Projects on Acid Precipitation in the Adirondack Park. Adirondack Park Agency: 10 p.

(section 6. 6)

- 375 LYKKE, E., 1980. Pollution Problems Across International Boundaries. Proceedings of the Twelfth Rochester International Conference on Environmental Toxicity, Mai 21-23, 1979: p. 477 - 488.
- 1630 MARTIN, H.C., 1986. Activités de recherche au Canada sur le TGDPA et les précipitations acides. Bureau Fédéral de Liaison du TGDPA. Downsview, Ontario. 342 p.
- 1268 MASON, J., H.M. SEIP, 1985. The current state of knowledge on acidification of surface waters and guidelines for further research. Ambio 14(1): p. 45 - 51.
- 1579 NORWEGIAN INSTITUTE FOR WATER RESEARCH, 1985. Rain project. Norwegian Institute for Water Research, Oslo, Norway. 4 p.
- 16 OTTAR, B., 1976. Acid Precipitation: Monitoring Long-Range Transport of Air Pollutants: The OECD Study. Ambio 5 (5-6): p. 203 - 206.
- 1577 PAULIN, G., 1982. Rapport des journées d'études Québec - Université Cornell sur les précipitations acides tenues à l'Université Laval les 14 et 15 janvier 1982 dans le cadre des accords Québec - New-York. Environnement Québec, 20 p.
- 720 PERCY, K.E., J.J. KERESKES (eds), 1981. Kejimkujik calibrated catchments program on the aquatic and terrestrial effects of the long-range transport of air pollutants for 1980-81. 48 p.
- 167 ROBITAILLE, G., Y. VIGNEAULT, 1979. Etudes à réaliser dans le cadre du projet - les polluants aéroportés et les pluies acides. Environnement Canada, Service Canadien des forêts et Direction des Eaux intérieures. 11 p.
- 1542 STAFFORD, R.T., 1985. Status of programs and future directions for maintaining air and water quality. In: Taking stock; resource management in the 50th year. Sabol, K. (ed.), Trans. of the fiftieth North American Wildlife and Natural Resources Conference, Washington, D.C., USA, March 15-20, 1985. p. 72 - 77.
- 1595 STOKES, P., 1988. Les polluants atmosphériques et leurs effets sur les écosystèmes aquatiques: Evaluations des besoins de recherche. Conseil des sciences du Canada. Document d'étude. 53 p.

(section 6. 6)

- 1014 THE ACID RAIN FOUNDATION INC., 1983. Acid Rain, Resources Directory. Saint-Paul, Minnesota. 64 p.
- 537 UNITED STATES. THE INTERAGENCY TASK FORCE ON ACID PRECIPITATION, 1981. National Acid Precipitation Assessment Plan. Draft. 129 p.

## CHAPITRE 7: LACS EXPERIMENTAUX

### Cote

- 241 ADAMSKI, J.M., M.F.P. MICHALSKI, 1975. Reclamation of acidified lakes Middle and Lohi, Sudbury, Ontario. Verhandlungen, Internationale Vereinigung fur Theoretische und Angewandte limnology 19: p. 1971 - 1983.
- 397 ARMSTRONG, F.A.J., D.W. SCHINDLER, 1971. Preliminary Chemical Characterization of Waters in the Experimental Lakes Area, Northwestern Ontario. J. Fish. Res. Bd. Canada, 28(2): p. 171 - 187.
- 51 BAKSI, W.F., J. RICHARDS, G. CRAIG, J. REINKE, 1978. Suitability of Water Quality in two Reclaimed Lakes in the Sudbury Area for Maintaining Fish Populations. Technical Bulletin 6(78). Ontario, Ministry of the Environment, Limnology and Toxicity Section, 13 p.
- 145 CHRISTOPHERSEN, N., R.F. WRIGHT, 1981. Sulfate Budget and a Model for Sulfate Concentrations in Stream Water at Birkenes, a Small Forested Catchment in Southernmost Norway. Water Resources Research 17(2): p. 377 - 389.
- 535 FINDLAY, D.L., G. SAESURA, 1980. Effects on phytoplankton biomass, succession and composition in lake 223 as a result of lowering pH levels from 7,0 to 5,6. Data from 1974 to 1979. Canadian Manuscript Report of Fisheries & Aquatic Sciences no. 1585, Pêches et Océans, Winnipeg: 16 p.
- 408 FISHER, D.W., A.W. GAMBELL, G.E. LIKENS, F.H. BORMANN, 1968. Atmospheric Contributions to Water Quality of Streams in the Hubbard Brook Experimental Forest, New-Hampshire. Water Resources Research 4(5): p. 1115 - 1126.
- 180 MALLEY, D.F., 1980. Decreased Survival and Calcium Uptake by the Crayfish Orconectes Virilis in Low pH. Can. J. Fish. Aquat. Sci. 37: p. 364 - 372.
- 182 MULLER, P., 1980. Effects of Artificial Acidification on the Growth of Periphyton. Can. J. Fish. Aquat. Sci. 37: p. 355 - 363.

(section 7)

- 555 POWELL, J.J., 1976. Preliminary report on the effects of neutralization on the fish community of Nelson lake, near Sudbury, Ontario. Ministry of Natural Resources, Fish and Wildlife Branch, Sudbury, Ontario. 38 p.
- 27 SCHEIDER, W.A., B. CAVE, J. JONES, 1975. Reclamation of Acidified Lakes near Sudbury Ontario by Neutralization and Fertilization. Ontario Ministry of the Environment, Limnology and Toxicity Section, Water Resources Branch, 48 p.
- 548 SCHEIDER, W.A., J. JONES, B. CAVE, 1976. A Preliminary Report on the Neutralization of Nelson Lake near Sudbury, Ontario, 1976. Ontario Ministry of the Environment, Limnology and Toxicity Section, Water Resources Branch. 36 p.
- 183 SCHINDLER, D.W., R.H. HESSLEIN, R. WAGEMANN, W.S. BROECKER, 1980. Effects of Acidification on Mobilization of Heavy Metals and Radionuclides from the Sediments of a freshwater lake. Can. J. Fish. Aquat. Sci., 37: p. 373 - 377.
- 181 SCHINDLER, D.W., R. WAGEMANN, R.B. COOK, T. RUSZCZYNSKI, J. PROKOPOWICH, 1980. Experimental Acidification of Lake 223, Experimental Lakes Area: Background Data and the First Three Years of Acidification. Can. J. Fish. Aquat. Sci. 37: p. 342 - 354.
- 148 SKARTVEIT, A., 1981. Relationships between Precipitation Chemistry, Hydrology, and Runoff Acidity. Nordic Hydrology, 12(2): p. 65 - 80.
- 369 YAN, N.D., W.A. SCHEIDER, P.J. DILLON, 1977. Chemical and Biological Changes in Nelson Lake, Ontario Following Experimental Elevation of Lake pH. Water Pollution Research Canada, 12: p. 213 - 231.
- 22 YAN, N.D., J. JONES, B. CAVE, L. SCOTT, M. POWELL, 1977. The effects of Experimental Elevation of Lake pH on the Chemistry and Biology of Nelson Lake Near Sudbury, Ontario. Ontario Ministry of the Environment, Limnology and Toxicity Section. 27 p.
- 149 YAN, N.D., P. STOKES, 1978. Phytoplankton of an Acidic Lake, and its Responses to Experimental Alterations of pH. Environmental Conservation 5 (2): p. 93 - 100.

Canada