

# NRC Nanotechnology

The National Research Council of Canada (NRC) Nanotechnology Research Centre devises nano-enabled solutions that meet scalability, integration, manufacturability and environmental health and safety requirements for product development.

We apply a collaborative approach connecting industry, university and other government partners to leverage the NRC's multidisciplinary expertise and national network of facilities. Our experience across diverse scientific fields and industrial sectors lets us translate nanotechnology breakthroughs into scalable materials, processes and manufacturable prototypes.



- Epoxy and composites.
   NRC's long-lasting polymer nano-composite offers superior mechanical properties at reduced manufacturing costs.
- Composite Lubricants.
   Our high temperature resistant lubricant using nano-additives has been adopted by industry.
- Membranes.
   NRC electro-spinning equipment has produced membranes that may be applicable to water purification.

# Sensors and devices

- Molecular junction. Our audio clipping devices, which use organic-based circuits, are the world's first commercial application of molecular electronics.
- Pathogen detection/air quality.
   NRC industrial research collaborations include Amine detectors for food processing and spoilage.

Micro electro-mechanical systems (MEMS). We are experienced in the design and fabrication of sensors for the aeronautic, biotechnology, and oil and gas industries.

## Nano-biology

NRC expertise extends to skin immunology, bioactive compounds for skin regeneration, elasticity, permeability, and resistance to infection, and allergic inflammation and treatment.

#### Work with us!

Flexible business models let NRC engage clients and partners on an individual basis or through collaborative programs, consortia, or other multi-party licensing or technical service arrangements. Our long-standing collaborative relationships with the University of Alberta and other nanotechnology research centres in Canada and internationally, extends our capabilities and impact.



## **CONTACT**

## **Jeff Matthews**

Client Relationship Leader
Tel.: 780-641-1706
Cell.: 587-920-5871

Jeffrey.Matthews@nrc-cnrc.gc.ca

# www.nrc-cnrc.gc.ca

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