

INRS (Institute national de la recherche scientifique)

[Dr. Daniel Coderre](#) was appointed rector of the Institute in May 2009.

- INRS has signed more than **70 international collaboration** agreements with academic institutions in **20 countries**, including France, Italy, Morocco, Tunisia, Mexico, and Vietnam.
- INRS has been a member of **Venice International University** (VIU) since 2014. It is unique consortium of 18 universities and institutions from all over the world.
- INRS inaugurated the **UNESCO Chair** on Materials and Technologies for Energy Conversion, Saving and Storage (MATECSS).
- INRS encourages research **partnerships** that transcend borders. Its research teams play an important role in international scientific networks such as:
 - International Associated Laboratory in **Nanotechnology and Nanosystems**
 - International Laboratory on **Plasma Technologies** and Applications
 - Samuel de Champlain International Associated Laboratory (an INSERM–INRS collaboration on **peptide pharmacology**)
 - Institute Pasteur international network
- In addition to the co-supervision agreement with **France** under which INRS welcomes a number of **doctoral students**, our university is currently developing partnerships for **dual-degree programs** with institutions in other countries.

Research Centers

The Eau Terre Environment Research Centre (Research Centre on Water, Earth, and the Environment) - Director: [Jean-François Blais](#) | Phone: 418-654-2575 | Email: info@ete.inrs.ca

Our focus: The future of our Planet

Training and research activities are organized around four focus areas:

- Hydrology
- Environmental decontamination and waste reclamation
- Biogeochemistry
- Geological sciences

CROSS-DISCIPLINARY FOCUS AREAS

- Environmental risks stemming from **natural events** and **contamination**
- Impacts and adaptations linked to climate change and **extreme weather events**
- Integrated management of **water** and **mineral resources** and land-use planning

- Technologies for the **restoration** of **urban** and **natural** environments

The Energy Matériaux Telecommunications (Energy Materials Telecommunications) Research Centre -

Federico Rosei, Director | E-mail: rosei@emt.inrs.ca

Excellence in research, innovation, and graduate and postgraduate education in the fields of **advanced materials**, **nanotechnology**, **photonics**, **telecommunications** and **sustainable energy**.

Our Focus: [The Future](#)

- Advanced materials and ultra-high speed photonics
 - The Center focuses its research activities in strategic sectors of **telecommunications**, **photonics** and **energy**.
- Telecommunications
- Sustainable energy

Contributing to the Advancement of Science

- Each year the Centre welcomes approximately **140 graduate and postgraduate** students and 30 postdoctoral fellows.

The INRS–Institute Armand-Frappier Research Centre - Director: [Charles M. Dozois](#) charles.Dozois@iaf.inrs.ca

- Contributes to graduate and postgraduate training, and technology transfer in the fields of human, animal, and environmental health.

Focus research activities on three major areas:

- **Infectious diseases, immunity, cancer, and epidemiology**
 - Develop new approaches to ensure **food safety** or to shed light on the **mechanisms responsible** for the development of diseases in humans and animals.
 - Characterize the various major **molecular** and **cellular interactions** that occur during infection by **viruses**, **bacteria**, or **parasites**, which could eventually serve as targets for **therapeutic intervention**.
 - Large-scale epidemiological
- **Microbiology and biotechnology**
 - Chosen three specific niches that contribute to the growth of **environmental biotechnology**.
 - These niches include first increasing our knowledge of microorganisms in their environment and then applying this knowledge to **waste treatment** and conversion and the use of **biological control** as an alternative to conventional **pesticides** that **pollute** the environment.
- **Environmental toxicology and chemical pharmacology**
 - Focus on the **effects of pollutants** on reproduction and **infertility**, **toxicology** of pregnancy and development, **immunotoxicology** and **inflammation**, liver and breast **carcinogenesis**,
 - The development of **peptide hormones** for **diagnostic and therapeutic** uses,
 - The illicit use of **drugs and medications**, particularly with respect to **sports doping** or performance enhancement.

- **Peptide signaling** and physiological systems, **bioorganic chemistry** and **enzyme inhibitors**, drug metabolism and doping control.

The Centre welcomes some **20 postgraduate fellows** and close to **140 graduate** and doctoral students enrolled in its five programs of study: **applied microbiology, experimental health science, biology, virology, and immunology.**

The Urbanisation Culture Société Research Centre - [Claire Poitras](#), Director | E-mail: claire.poitras@ucs.inrs.ca

Our Focus: Social Sciences

- Montreal – A City in Transition
- Mobility and Migration
- Local Economic Development, Work, and Innovation
- Reconstituted Territory, Decentralization, and Democracy
- Families, Personal Networks, and Social Solidarity
- Life Stages, Life Paths, and Intergenerational Dynamics
- Social Exclusion and Vulnerability
- Habitat, Neighborhoods, and Lifestyle
- Cultural Practices, Social Space, and Territory
- Cultural Diversity, Immigration, and Modes of Cohabitation
- The Institutionalization of Culture

The Urbanization Culture Society (Research Centre offers six graduate and postgraduate programs in the fields of urban studies, population studies, and mobilization.