



Seminar: Dr. Federico Rosei

Multifunctional Materials For Emerging Technologies

FRIDAY, FEBRUARY 2, 2024

03:00 P.M. – HEC 101

Abstract: This presentation focuses on structure property/relationships in advanced materials, emphasizing multifunctional systems that exhibit multiple functionalities. Such systems are then used as building blocks for the fabrication of various emerging technologies. In particular, nanostructured materials synthesized via the bottom-up approach present an opportunity for future generation low cost manufacturing of devices. We focus in particular on recent developments in solar technologies that aim to address the energy challenge, including third generation photovoltaics, solar hydrogen production, luminescent solar concentrators and other optoelectronic devices

Biography



Dr. Federico Rosei, is a distinguished Professor at the National Institute of Scientific Research for Energy, Materials and Telecommunications in Canada. Having served as the Director of the institute from 2011 to 2019, he holds the prestigious Canada Research Chair (Senior) in Nanostructured Materials since May 2016. His remarkable career also includes holding the Canada Research Chair (Junior) in Nanostructured Organic and Inorganic Materials from 2003 to 2013 and the UNESCO Chair in Materials and Technologies for Energy Conversion, Saving, and Storage since January 2014. With a focus on structure/property relationships in nanomaterials, he explores their applications as fundamental building blocks in emerging technologies. His impactful research has received support from various funding sources, totaling over M\$ 18, including contributions from the Province of Quebec, the Federal Government of Canada, and international agencies. His collaborative efforts extend to partnerships with over twenty Canadian R&D companies. As a testament to his contributions to the scientific community, Dr. Rosei is a co-inventor of three patents and has authored more than 475 articles in prestigious international journals, with citations exceeding 24,600. A sought-after speaker, Dr. Rosei has been invited to share his insights at over 360 international conferences, including 50 Keynotes and 26 Plenaries. In addition to his academic engagements, he has delivered over 275 seminars and colloquia, conducted more than 60 professional development lectures, and given 50 public lectures in 51 countries