

Lectures at the Leading Edge 2018-2019

Lectures at the Leading Edge enhance our culture of excellence by providing a rich view of the broad landscape and far-reaching horizons of chemical engineering and applied chemistry education and research.

All lectures are held on a Wednesdays at 12:00 pm in Wallberg WB116, 200 College Street, with the exception of Monday, 12 November which will be held in Bahen BA1170, 40 George Street at 1:00pm.

The lectures are free, no rsvp is required, and everyone is welcome to attend!



2018 - 2019 Lectures at the Leading Edge

Irving O. Shoichet Distinguished Lecture

Giving New Life to Materials for Energy, the Environment, and Medicine

Angela Belcher, *Massachusetts Institute of Technology*

Wed, Oct 17, 2018 | 12:00 pm - 1:00 pm | WB116

2018-19 AEESP Distinguished Lecture

Co-hosted with CivMin, and Departments at Ryerson, and York

Can Engineering Controls Shape the Drinking Water Microbiome and Reduce the Risk of Opportunistic Infections?

Lutgarde Raskin, *University of Michigan*

Mon, Nov 12, 2018 | 1:00 pm - 2:00 pm | Bahen Centre BA1170

Closed-loop Discovery of Materials: Robotics, Artificial Intelligence and Predictive Methods for the Design of Active Organic Materials

Alán Aspuru-Guzik, *University of Toronto*

Wed, Nov 21, 2018 | 12:00 pm - 1:00 pm | WB116

Mammalian Synthetic Biology: Foundation and Therapeutic Applications

Ron Weiss, *Massachusetts Institute of Technology*

Wed, Dec 5, 2018 | 12:00 pm - 1:00 pm | WB116

Reaction Mechanisms and Structure Sensitivity for Heterogeneous Catalyst Discovery from First-Principles

Manos Mavrikakis, *University of Wisconsin - Madison*

Wed, Jan 16, 2019 | 12:00 pm - 1:00 pm | WB116

Co-hosted with the Institute for Water Innovation (IWI)

Thermodynamics and Transport in Desalination Systems Engineering

John Lienhard, *Massachusetts Institute of Technology*

Wed, Jan 23, 2019 | 12:00 pm - 1:00 pm | WB116

Co-hosted with Ontario Centre for the Characterisation of Advanced Materials (OCCAM)

Metabolic Imaging at the Single-cell Scale: Recent Advances and Future Challenges in Mass Spectrometry Imaging

Ian Gilmore, *National Physical Laboratory, UK*

Wed, Mar 20, 2019 | 12:00 pm - 1:00 pm | WB116

Microbial Electrosynthesis for a Carbon-neutral Energy and Chemicals Economy

Alfred Spormann, *Stanford*

Wed, Mar 27, 2019 | 12:00 pm - 1:00 pm | WB116

Co-hosted with the Institute for Studies in Transdisciplinary Engineering Education and Practice (ISTEP)

Going Beyond the Fads and Jargon: What Does Research Tell Us About Teaching for High Quality Learning in Science and Engineering?

Jennifer Case, *Virginia Tech*

Wed, Apr 10, 2019 | 12:00 pm - 1:00 pm | WB116