THE MATERIALS SCIENCE AND ENGINEERING DEPARTMENT
FALL COLLOQUIUM SERIES PRESENTS:

Ted Sargent

Professor, Chemistry

Northwestern University

Quantum dots, perovskites, and nanomaterials applied in sensing, energy harvesting, and energy storage

My interests lie in collaborating with materials scientists and materials chemists to investigate, and then deploy, materials in a device/applied context. In one example, we have used colloidal quantum dots as the basis to make sensitive photon detectors, including for near infrared and short-wavelength infrared imagers. In another, we seek to advance the performance and reliability of solar cells (both single-junction and tandems) based on halide perovskite semiconductors. In our third program, we develop catalysts for the electroreduction of CO2 to chemicals such as ethylene, and to fuels such as ethanol and propanol: these are termed low-carbon, or renewable, fuels and feedstocks, when the processes are powered efficiently using renewable electricity.

Ted Sargent is the Lynn Hopton Davis and Greg Davis Professor at Northwestern effective September 1, 2022, where today he holds appointments in Chemistry and in ECE. He received the B.Sc.Eng. (Engineering Physics) from Queen's University in 1995 and the Ph.D. in Electrical and Computer Engineering (Photonics) from the University of Toronto in 1998. Until now he has held the rank of University Professor at the University of Toronto, where he is appointed in both Electrical and Computer Engineering and in Materials Science and Engineering. He holds the Canada Research Chair in Nanotechnology and also serves as Vice President – Research for the University of Toronto. His publications have been cited 68,000 times.

Tuesday, October 26 • 4 pm CT • Tech L211

Registration is required. RSVP here.

Questions? Contact elena.lindstrom@northwestern.edu.

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