

THURSDAY
OCT
27

ECE SEMINAR SERIES



HANY AZIZ
PROFESSOR AND
UNIVERSITY RESEARCH
CHAIR

Date: Oct. 27, 2022

Time: 2:30pm

Location: EIT 3142

Organic & Quantum-dot Light Emitting Devices: Current Challenges & Research Opportunities

ABSTRACT: Organic Light Emitting Devices (OLEDs) are now used in commercial products, and Quantum-dot LEDs (QLEDs) are expected to follow suit in the next 3-5 years. As the technology of organic and hybrid semiconductors moves from the lab to the marketplace, certain fundamental limitations and technological challenges related to their performance, reliability and manufacturing become increasingly more important and create new opportunities for research. In this seminar a brief introduction to OLEDs and QLEDs will be provided, and some of the current challenges and new research opportunities will be highlighted. Some of our research activities in both areas will also be briefly presented.

BIOGRAPHY: Hany Aziz is a Professor and University Research Chair in the Department of Electrical & Computer Engineering at the University of Waterloo and the Waterloo Institute for Nanotechnology (WIN). He conducts research in the area of organic and hybrid (organic/ inorganic) electronic and optoelectronic materials and devices, with a focus on material and device physics. His research spans a wide range of interests from studying molecular level electronic, excitonic and material aging processes and device failure mechanisms, to developing novel devices and fabrication technologies for next generation electronics. He has published more than 180 papers in this area and was awarded 57 US patents. He obtained his PhD in materials science and engineering from McMaster University, Canada in 1999. Prior to joining the University of Waterloo in 2007 he was a research scientist at Xerox Research Centre of Canada.