



**Seminar Topic:
Towards New Materials for Improved Solar Cells**

Associate Professor Andrew Grimsdale

Abstract

Routes for the synthesis of new materials intended to improve the efficiency of solar cells are presented. New hole transporting materials have been made, which can match the device performance of the currently used standard material, spiro-OMeTAD, but are significantly cheaper to make. Routes to new heteroacenes which may be able to enhance solar cell performance via singlet fission have been developed.

Biography

Andrew Grimsdale graduated in chemistry from the University of Auckland, New Zealand (B.Sc., 1983, M.Sc. 1984, Ph.D. 1990). After working at the Universities of Swansea and Cambridge, UK, at the Max-Planck Institute for Polymer Research, Mainz, Germany, and at the University of Melbourne, Australia, he joined MSE in late 2006, and received promotion with tenure in 2012. He has produced over 150 publications (>13,000 citations, h-index 51). His research interests centre on the synthesis of functional organic materials, especially those with optical and/or electronic properties suitable for use in optoelectronic applications such as light-emitting diodes and solar cells.

**Wednesday, 22 January 2020 || Time: 2:00 pm – 3:00 pm ||
Venue: MSE Meeting Room (N4.1-01-28)
Hosted by: Professor Hng Huey Hoon**