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**Seminar Series:** MAE Seminar, 2015 spring quarter

**Date and Time:** 05/08/2015 - 10:30 am–11:30 am

**Location:** MDEA, #311 on the UCI Campus Map

**Hosted by:** Prof. Yun Wang (yunw@uci.edu)

**Title:** Nanostructured Materials for Photoelectrochemical Generation of Hydrogen and Optoelectronic Devices

**Abstract**

In this seminar, I will first discuss our research results of photoelectrochemical generation of hydrogen splitting water using solar energy. In particular, I will discuss the use of dye-sensitized nanostructured chemically-modified titanium dioxide photoelectrodes. The development of these photoelectrodes and their stability in base electrolyte solution will be discussed. In the second part of the seminar, I will present some of my research into the design and development of quinoline-based organic semiconducting materials and organic-inorganic nanostructured hybrid dendrimers for optoelectronic device applications.

**Speaker's Bio**

Maksudul M. Alam received his Ph.D. from Tohoku University, Sendai, Japan in 1999. He was a postdoctoral research associate in the Department of Chemical Engineering at the University of Washington, Seattle from 1999–2003 and in the Department of Molecular Pharmacology at UCLA from 2004–2005. He is currently a Deputy Director of R&D at InnoSense LLC, Torrance, CA. He is the recipient of InnoSense LLC Nanowire Sensor Technology Innovator Award, Japan Ministry of Education, Science, Sports and Culture Fellowship (1993–1999), and Dhaka University Vice Chancellor Award. He has over 60 peer reviewed publications, one book chapter and five patents. His research interests include nanomaterials, polymers, renewable/alternative energy, optoelectronic devices, and chemical/biological sensors.