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The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Applied Mathematics

**Molecular Simulations of Solar Energy Harvesting
Materials**

by

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Abstract

Solar energy is one of the promising renewable energy resources for reducing the consumption of fossil fuels and associated carbon dioxide emission. In this talk, I will address our recent works on investigating the structural evolution of several solar energy harvesting materials, namely, organic solar cells, organic-inorganic hybrid solar cells (including perovskite solar cells), and photosynthesis membrane, by employing multiscale molecular simulations. We demonstrate that we can successfully reveal structural properties of these solar energy harvesting materials under different fabrication protocols ranging from solution processing to vacuum deposition, and can potentially provide experimental teams insights for fabricating of the next-generation solar cells with superior efficiency.

Date: Friday, 18 Aug 2017

Time: 3:00p.m. – 4:00p.m.

***Venue: Room 4504, Academic Building
(near Lifts 25 & 26), HKUST***

All are welcome!