

Graduate Department of Pharmaceutical Sciences

The Graduate Department of Pharmaceutical Sciences, Leslie Dan Faculty of Pharmacy
Department of Chemistry, Faculty of Arts & Science, University of Toronto

JOINT SEMINAR

AIE Nanodots for Bioimaging, Diagnosis and Therapy Applications



PROF. BEN ZHONG TANG

Department of Chemistry, Division of Biomedical Engineering
Division of Life Science, Hong Kong University of Science
and Technology, Kowloon, Hong Kong, China

Prof. Tang has published >700 papers. His work has been cited over 20,000 times, with an h-index of 86. He has been listed by Thomas Reuters as a Highly Cited Researcher in the categories of Chemistry and Materials Science. He has opened up a new area of research on aggregation-induced emission, which was ranked as one of the Top 100 Research Fronts by Thomas Reuters in 2013. He received a State Natural Science Award from Chinese Government in 2007. He is currently serving as Editor of *Advances in Polymer Science* (Springer) and Associate Editor of *Polymer Chemistry* (RSC) and sitting in the international advisory boards of a dozen other journals.

In this seminar, Prof. Tang will discuss a phenomenon termed “aggregation-induced emission” (AIE), the utility of AIE dots as sensitive and specific probes for in vitro and in vivo bioimaging, and their applications in the areas of cancer diagnosis and photodynamic therapy. Guided by the RIM (restriction of intramolecular motions) mechanism of the AIE effect identified by his lab, they have developed a wide variety of new AIE luminogens (AIEgens) with emission colors covering the whole visible spectrum, luminescence quantum yields up to unity, and remarkable susceptibility to multi-photon excitation. Nanoparticles of the AIEgens (alias “AIE dots”) with excellent biocompatibility and strong photobleaching resistance can be readily fabricated.

11:00 a.m., Friday, June 19, 2015
Room **PB255 (Big Pod)**, 144 College Street
Leslie Dan Faculty of Pharmacy
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