

Departmental Seminar Announcement

Synthesis, Luminescence, and Applications of Lanthanide Coordination Polymers and Metal-Organic Frameworks

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Coordination polymers are a class of solid-state compounds in which discrete metal clusters are organized into 1-, 2-, or 3-dimensional materials via organic “linker” moieties. Due to the unique structural features of these materials, particularly their large porosities, they have found utility in molecular storage, separations, and catalysis. If lanthanide ions are used as the metal center, unique spectroscopic, magnetic, and chemical properties can be bestowed to the coordination polymer.

Such compounds have applications in solid-state lighting, sensing, catalysis, and bioimaging. By combining these optical properties with magnetism and porosity, theranostic agents can be developed that can image and treat disease simultaneously. Studies of the luminescent properties of several coordination polymers and efforts toward developing them for applications in bioimaging and sensing will be presented.

Date: Friday, February 17, 2017

Time: 11:00 am to 12:00 pm

Location: PG5 - 153 MMC (Live)

Marine Sciences Building Room 105 (MSB-105) – BBC (via Polycom)