
The 180th iCeMS SEMINAR

**Mon 10 Nov 2014
16:00-17:30**

Explosives Sensing by Nanoscopic Architectures and Chemical Reactions in Confined Nanospace

Lecturer: **Dr Partha Sarathi Mukherjee**
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Venue: Lecture Room A1-001, A1 Building
Katsura campus, Kyoto University

Engineering discrete molecular architectures of defined shapes and sizes using metal-ligand coordination as driving force is an active field of current research. The architectural advantage of the rigid square-planar coordination environment of Pd(II) and Pt(II) has long been utilized for this purpose. My lecture will focus on the design principle including several examples of electron rich molecular nano-cages that are potential in sensing electron deficient explosives like TNT, DNT etc. My lecture will also focus on the self-assembly of water soluble Pd(II) molecular cages and use of their confined nanospace as molecular vessels to perform several organic transformations in environmental friendly aqueous medium in catalytic manner. Self-sorting in organic cage formation and cage to cage transformations will also be highlighted.

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Hosted by: iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University

