

# Workshop on Control and Functions of Two-Dimensional Materials

**Date:** June 6 (Mon) 2016

**Venue:** Engineering Science International Building, Sigma Hall

**Organizers:**

Dr. Yoshito Tobe (Graduate School of Engineering Science, Osaka University)

Dr. Keiji Hirose (Graduate School of Engineering Science, Osaka University)

**Cooperation:**

Center for Promotion of Advanced Interdisciplinary Research (C-Pair)

Graduate School of Engineering Science, Osaka University



## Purpose of the Workshop:

Control of two-dimensional architectures and the relevant electronic, magnetic, and mechanical properties is central to the development of unconventional materials functions. Such research work is interdisciplinary in nature and is driven by cooperation of different disciplines such as chemistry, physics, and electronics, and internationally as well. In this respect, the organizers aim to vitalize such activities by this workshop.

## Program

- 10:00-10:10    Opening Remarks
- 10:10-10:45    Prof. Yoshito Tobe (Osaka University)  
    [Tailoring Two-Dimensional Nanoporous Space for Guest Binding](#)
- 10:45-11:20    Prof. Shengbin Lei (University of Tianjin)  
    [Two dimensional host-guest architectures with a covalent framework as host](#)
- 11:20-11:55    Prof. Takashi Hirose (Kyoto University)  
    [Design of Highly Photoresponsive 2-D Molecular Orderings Based on Cooperative Assembly at the Liquid/Graphite Interface](#)
- 11:55-12:30    Prof. Takuji Ogawa (Osaka University)  
    [Control of single molecule magnetism and single molecule conductance of terbium double-decker complexes](#)
- 12:30-13:30    Lunch Break
- 13:30-14:05    Prof. Markus Lackinger (Deutsches Museum)  
    [Stable or metastable? - thermodynamics vs. kinetics in molecular self-assembly](#)
- 14:05-14:40    Dr. Matthew D. Blunt (University College London)  
    [2D self-assembly of DNA base functionalised porphyrins at a liquid-solid interface](#)
- 14:40-15:15    Prof. Tsuyoshi Hasegawa (Waseda University)  
    [Electrochemically-controlled information processing devices](#)
- 15:15-15:30    Coffee Break
- 15:30-16:05    Prof. Steven De Feyter (KU Leuven)  
    [From structure to function in self-assembled networks at the liquid-solid interface](#)
- 16:05-16:40    Prof. Hirokazu Tada (Osaka University)  
    [Magnetoresistance in Organic Materials](#)
- 16:40-16:50    Closing Remarks