



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