The 76th Okazaki Conference
Advanced Spectroscopy of Organic Materials for Electronic Applications

Date: November 23, 2016 – November 25, 2016
Site: Okazaki Conference Center (OCC), Conference Room C (2nd floor)

Outline

A rich of functionality found in the molecular-based materials has considerable attention in recent years. To improve the performance of the organic molecular devices and to realize any novel functional devices with molecules, deep insight into the electronic structure is requested. Moreover development in the experimental method and achievement in the novel technique as like in situ/operando techniques and time-resolved spectroscopy etc is important to study. ASOMEA (Advanced Spectroscopy of Organic Materials for Electronic Applications) covers the topics related to spectroscopic techniques and theoretical modeling for the understanding the electronic structure of organic electronic materials and related interfaces. We expect around 80 participants at the workshop. We hope a lively and intimate atmosphere for participants to discuss the progress and development of a number of spectroscopy topics.

Program

November 22

17:30- reception

November 23

9:10- Opening
9:20- Ulrich Höfer (Marburg, Germany), *Time-resolved spectroscopy of electron transfer processes at metal/organic interfaces*
10:10- Michael Zharnikov (Heidelberg, Germany), *Core-hole clock studies on assembles of molecular wires*
10:50- Oliver L.A. Monti (Arizona, USA), *Electronic Structure and ultrafast dynamics at the hybrid interface of organic semiconductors with quasi-2D SnS_2*
11:20- Susumu Yamamoto (Tokyo, JPN), *Tracking photo-excited carriers on semiconductor surfaces by VUV and soft X-ray pulses*

11:50-13:00 LUNCH

13:00- Stephan Kümmel (Bayreuth, Germany), *The Importance of the final state: Perpendicular emission, dichroism, and energy dependence in angle-resolved photoemission*
13:40- Achim Schöll (Wurzburg, Germany), *Orbital imaging by momentum microscopy: Determination of phase symmetry and molecular vibrations*
14:10- Daniel Lüftner(Graz, Austria), *Photoemission tomoghrapy of NiTPP on Cu(100)*

14:40-15:10 COFFEE

15:10- Torsten Fritz (Jena, Germany), *Optical in-situ differential reflectance spectroscopy (DRS): A powerful tool to investigate ultrathin molecular films*
15:40- Hisao Ishii (Chiba, JPN), *hv-dependent high-sensitivity photoemission spectroscopy to probe density-of-states of organic films*
16:10- Yasuo Nakayama(TUS, JPN), *Functional organic and organic-inorganic-hybrid materials studied by excitation energy dependence of the photoelectron spectroscopy*

16:40- Steffen Duhm (FUNSOM, China), *Lead halide perovskites: Formation mechanism and energy-level alignment with organic semiconductors*

17:10-17:30 COFFEE

17:30- Hiroshi M. Yamamoto (IMS, JPN), "HOT NEWS" *Electronic phase-transitions at an organic interface*

18:00-18:20 BREAK
18:20- Dinner, Remarks by Director Maki Kawai
19:00- 21:00 Poster Session

November 24

8:40- Hiroyuki Yamane (IMS, JPN), *Valence-band dispersion in organic thin films and interfaces*
9:30- Peter Krüger (Chiba, JPN), *Theoretical analysis of electronic state and X-ray absorption spectra of transition metal phthalocyanines and porphyrins*
10:00- Heiko Peisert (Tubingen, Germany), *Tuning of interactions of transition metal phthalocyanines at metal surfaces by intercalated graphene buffer layers*

10:30-11:00 COFFEE

11:00- Hiroyuki Yoshida (Chiba, JPN), *Origin of the orientation dependence of ionization energy and electron affinity in molecular thin films: Impact of molecular quadrupole moment*
11:30- Koki Akaike (TUS, JPN), *Energetic landscape correlated with interface structure at organic heterointerfaces*
12:00- Patrik Amsalem (Humboldt Berlin, Germany), *The electronic structure In doped molecular semiconductors*

12:30-13:40 PHOTO, LUNCH

13:40- Lothar Weinhardt (KIT, Germany), *Studying energy relevant materials using electron and (in-situ) soft x-ray spectroscopy*
14:20- Faris Gel'mukhanov (KTH, Sweden), *Nuclear dynamics of water molecules studied by X-rays*
14:50- Masanari Nagasaka (IMS, JPN), *Local structure of liquid and liquid-liquid interface studied by soft x-ray absorption spectroscopy in transmission mode*

15:20-15:50 COFFEE

15:50- Maria Hahlin (Uppsala, Sweden), *Characterizing the interphases in Li ion batteries*
16:30- Xianjie Liu (Linkoping, Sweden), *Understanding interfacial properties of conjugated electrolyte/electrode with its application in organic electronics*
17:00- Niclas Johansson (Lund, Sweden), *Au(111) supported MnSalen: UHV to ambient pressure XPS study of a surface supported homogeneous catalyst with retained activity*

17:30-17:50 BREAK
17:50-18:20 UVSOR TOUR
19:00- Banquet

November 25

8:40- Joachim Schnadt (Lund, Sweden), *Ambient pressure XPS in the real-time monitoring of thin film growth*
9:30- Payam Shayesteh (Lund, Sweden), *Operando APXPS study of the ALD of HfO_2 on Si(111)*

10:00-10:30 COFFEE

10:30- Yasumasa Takagi (IMS, JPN), *In-Situ near ambient pressure hard X-ray photoelectron spectroscopic study of Pt nanoparticles on a polymer electrolyte fuel cell electrode*
11:00- Takanori Koitaya (Tokyo, JPN), *CO_2 activation on Zn-modified Cu surfaces studied by ambient-pressure X-ray photoelectron spectroscopy*
11:30- Masaaki Yoshida (Keio, JPN), *Operando observation of oxygen evolution catalysts by XAFS*

12:10- CLOSING