# ---The first international workshop on---

# Momentum Microscopy & Spectroscopy for Materials Science

at Okazaki Conference Center, 22nd-23rd Feb. 2019

Welcome to the UVSOR workshop "Momentum Microscopy & Spectroscopy for Materials Science"! Valence band and molecular orbital imaging techniques have been extensively developed owing to constructions of new light sources and developments of high-performance detectors. UVSOR has a plan to construct a Momentum Microscopy & Spectroscopy end station dedicated for Materials and Molecular Science. This workshop will focus on new science opened by such new analysis tools and methods. Keynote lectures by the Maestro of photoelectron spectroscopy as well as various cutting-edge presentations by invited researchers is arranged. Since this is the first workshop, the organizers asked researchers outside of UVSOR to share their insights and their networks. A poster session is planned. Proposals and suggestions of experiments are welcome!

See you at Okazaki!

Topics:

- Momentum-resolved Photoelectron microscopy / spectroscopy
- Orbital tomography and valence photoelectron diffraction
- New instrumental developments, interesting materials and more…

Organizer (UVSOR)

Satoshi Kera & Fumihiko Matsui

# Program (*tentative*)

2019.02.22 Friday	(Registration opens from 9:00)
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9:20 Opening Prof. Satoshi Kera (Institute for Molecular Science)

## Session: Introduction of UVSOR-MM project

9:30 Prof. Shigemasa Suga (Osaka University)

Keynote Lecture "Frontier of Spin- & Angle-Resolved Photoelectron Spectroscopy by Momentum Microscopy"

- 10:15 Dr. Fumihiko Matsui (Institute for Molecular Science)"Momentum Microscope project at UVSOR"
- 10:50 Coffee Break

# Session: Proposals of Materials Science by MM

- 11:05 Prof. Yoshihiro Kubozono (Okayama University) invited
- 11:40 Prof. Lada Yashina (Lomonosov Moscow State University) invited
- 12:25 Lunch

### Session: Advanced ARPES studies (1)

13:40 Prof. Koji Horiba (Institute of Materials Science, KEK) invited

"Synchrotron-based ARPES study at VUV-SX combination beamline KEK-PF BL-2 MUSASHI"

14:15 Prof. Taiichi Okuda (Hiroshima University) invited

"Recent activities and future prospects of spin- and angle-resolved photoemission spectroscopy at HiSOR"

14:50 Prof. Kazuyuki Sakamoto (Chiba University) invited

"Spin-polarized bands at solid surfaces"

#### 15:25 Coffee Break

#### Session: Proposals of Molecular Science by MM

- 15:45 Prof. Sergey Subach (Forschungszentrum Jülich PGI-3) invited
- 16:30 Prof. Yoichi Yamada (University of Tsukuba) invited
- 17:05 Prof. Satoshi Kera (Institute for Molecular Science)"Imaging of electron delocalization upon assembling the molecules"
- 17:40 Workshop photo
- 17:50-20:00 Poster session with Buffet-style dinner

#### 2019.02.23 Saturday

#### Session: Inputs from theoreticians

- 9:00 Prof. Peter Kruger (Chiba University) invited
- 9:35 Prof. Yoshitada Morikawa (Osaka University) invited

#### Session: Advanced ARPES studies (2)

- 10:10 Prof. Yukiaki Ishida (The University of Tokyo, ISSP) invited
- 15:35 Coffee Break

#### Session: Holography and Imaging combined with Data Science

- 11:05 Prof. Tomohiro Matsushita (SPring-8, Riken) invited
- 11:40 Prof. Masato Kotsugi (Tokyo University of Science) invited"Topological data analysis of labyrinth magnetic domain"
- 12:15 Closing

Optional tour to UVSOR after lunch is planned.