

18:00 **Banquet**

2018/12/01

- 9:30 **Transfers of the Techniques from SPring-8 BL07LSU**
Iwao Matsuda (The institute for Solid State Physics, the University of Tokyo)
- 10:00 **Current status of development of micro- and nano- focusing mirrors for soft x-rays**
Hidekazu Mimura (Graduate school of engineering, The University of Tokyo)
- 10:30 **A two-color BL brings new colors of a SR facility**
Hitoshi Abe (Institute of Materials Structure Science, High Energy Accelerator Research Organization / Dept. of Materials Structure Science, Sch. of High Energy Accelerator Science, SOKENDAI)
- 11:00 **Development of soft x-ray polarization switching for studying spin dynamics**
Hiroki Wadati (Institute for Solid State Physics, University of Tokyo)
- 11:30 **Lunch**
- 13:00 **Combining Nano-focus, Operando, Machine Learning, Enough for further progress?**
Hirokazu Fukidome (Research Institute of Electrical Communication, Tohoku University)
- 13:30 **Catalysis science by *operando* soft X-ray spectroscopy:
Present status and future prospect at next generation synchrotron radiation facility**
Susumu Yamamoto (The Institute for Solid State Physics, The University of Tokyo)
- 14:00 **Solid state physics and its future development with nano-spin ARPES**
Takeshi Kondo (ISSP, The University of Tokyo)
- 14:30 **Poster Session**
- 15:00 **Coffee Break**
- 15:30 **Crystal structure prediction by data assimilation**
Synge Todo (Department of Physics, University of Tokyo / Institute for Solid State Physics, University of Tokyo / MaDIS, National Institute for Materials Science)
- 16:00 **Recent status and future of a scanning transmission X-ray microscope in UVSOR-III)**
Takuji Ohigashi (UVSOR Synchrotron Facility, Institute for Molecular Science / Sokendai)
- 16:30 **Development for high-speed magnetic imaging by fusion of coherent soft X-ray and information technology)**
Yuichi Yamasaki (NIMS-MaDIS, JST-PRESTO, RIKEN-CEMS)
- 17:00 **Strategy for resonant inelastic soft X-ray scattering using next-generation synchrotron radiation)**
Yoshihisa Harada (Institute for Solid State Physics, University of Tokyo)
- 17:30 **Closing Address** Nobuhiro Kosugi (JSSRR)

The conference was organized on November 30 and December 1 to promote scientific and technological innovations of soft X-ray synchrotron radiation, motivated by the announcement on the next-generation facility by the Minister of Education, Culture, Sports, Science and Technology on July 3, 2018. It has successfully brought together more than 200 participants, including the presidents and the outstanding researchers of synchrotron radiation institutes and societies from all over Japan. The presentations at the ISSP lecture room were broadcast live to a conference room in SPring-8 through the internet. On the first day, the program focused on science and technology to be evolved at the new facility, while, on the second day, it featured experimental methods and information technologies to be developed toward researches with the light source.

With the next-generation soft X-ray synchrotron radiation, measurements are expected to be made with multi-dimensional data acquisitions or with ultra-high resolutions that have never been possible at the existing facilities. The attendance interdisciplinarily argued research topics to respond to needs in academic and industrial fields today. There was also vigorous discussion on the cutting-edge informatics to be applied in the data analysis. We were confident that the workshop was very timely and that all the arguments would become seeds of the novel science and technology.

The conference was hosted by the Institute for Solid State Physics (the University of Tokyo), Synchrotron Radiation Research Organization (the University of Tokyo), Tohoku University, and User Community of VUV•SX high-brilliant light sources.

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