

3. Workshops & Meetings

ISSP workshop: *Core technology toward the frontier soft X-ray science*

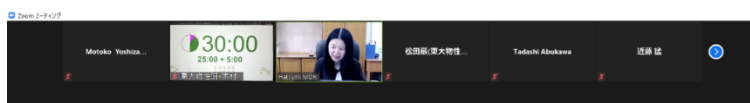
Date: 2021/3/4 (Thu.)

Place: On Zoom

Committee members: T. Kimura, T. Arima, F. Komori, Y. Harada, I. Matsuda, H. Mimura, and T. Kondo

The workshop was organized on March 4 by the Institute for Solid State Physics (ISSP) and Synchrotron Radiation Research Organization of the University of Tokyo (UTokyo-SRRO) and User Community VUV-SX High-Brilliance Light Sources. The workshop was held online using ZOOM, and about 140 participants from a wide range of fields, including universities, companies and research institutes, attended. In this workshop, eight researchers were invited to give talks on the latest trends in soft X-ray science and to discuss the new direction that will emerge from the next-generation synchrotron radiation facility in Sendai. The next-generation synchrotron radiation facility is expected to improve the coherence and intensity of X-rays. In each lecture, various research results on imaging and spectroscopic techniques were reported, ranging from basic beamline technologies to applied measurements, which can use the features of the new facility.

The newly-organized general discussion session (Moderator: Professor Abukawa from Tohoku University) provided an opportunity for in-depth questions and answers about the contents of each lecture. In the last session, Director Harada presented the prospects and direction of the SOR facility towards the operation start of the new synchrotron radiation facility in 2023.



ISSPワークショップ
先端軟X線科学への基幹技術



開催日時：2021年3月4日（木曜日）
午前10時～午後5時
会場：ZOOMによるオンライン開催

主催：東京大学物性研究所
共催：東京大学放射光分野融合国際卓越拠点、VUV・SX高輝度光源利用者懇談会
協賛：日本放射光学会、日本表面真空学会
提案者：木村隆志、有馬孝尚、小森文夫、原田慈久、松田巖、三村秀和、近藤猛

Program:

10:00- Opening Address

Hatsumi Mori (ISSP, The University of Tokyo)

Session 1

[Chair: Takeshi Kondo (ISSP, The University of Tokyo)]

**10:05- Catalytic Surface Science Opened by Synchrotron Radiation X-ray Operando Measurements:
From SPring-8 BL07LSU to the Next-Generation Synchrotron Radiation Facility**

Susumu Yamamoto (International Center for Synchrotron Radiation Innovation Smart, Tohoku University)

10:35- Frontier soft X-ray science in a spintronics device

Shinji Miwa (ISSP, The University of Tokyo)

11:05- Magnetic imaging with soft X-ray nanobeam formed by an ellipsoidal mirror

Akihiro Suzuki (Research Institute for Electronic Science, Hokkaido University)

11:35- Optics design for public beamlines of a new 3-GeV synchrotron radiation facility in Japan

Takashi Imazono (National Institutes for Quantum and Radiological Science and Technology)

12:05- lunch

Session 2

[Chair: Hidekazu Mimura (Dept. of Precision Engineering, Graduate School of Engineering, The University of Tokyo)]

13:30- Development of Soft X-ray Image Sensor sxCMS

Shigetoshi Sugawa (New Industry Creation Hatchery Center, Tohoku University)

14:00- Towards Visualization of Time Evolution by Coherent X-ray Diffraction Imaging

Yukio Takahashi (International Center for Synchrotron Radiation Innovation Smart, Tohoku University)

14:30- High-resolution X-ray microscope based on X-ray imaging mirrors

Satoshi Matsuyama (Department of Materials Physics, Nagoya University)

15:00- Development of novel soft X-ray imaging technique at BL07LSU

Takashi Kimura (ISSP, The University of Tokyo)

15:30- Coffee Break

Session 3

[Chair: Tadashi Abukawa (Institute of Multidisciplinary Research for Advanced Materials, Tohoku University)]

15:45- Discussion on the next projects

16:45- Closing Address

Yoshihisa Harada (ISSP, The University of Tokyo)