## VII. SPring-8 Users Community (SPRUC)

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Professor E. Nishibori University of Tsukuba SPRUC Chairman FY2023

The SPring-8 Users Community (SPRUC) is a user society comprising of all users of SPring-8/SACLA. In addition to individuals, representative organizations comprising 26 institutes (principal universities, national/international research institutes, industries, and beamline consortiums) participate in SPRUC to discuss strategies and perspectives to promote the utilization of SPring-8 and SACLA.

The SPring-8 Symposium is an important annual event of SPRUC. SPring-8 Symposium 2023 was jointly organized by Osaka University, RIKEN, and JASRI, and held on September 26–27 at Osaka University Hall and streamed online. A total of 489 people attended the symposium, 268 of whom participated online. The symposium theme was "Possibilities Generated by Integrations of SPring-8/SACLA and Data Science." This theme was designated to create a vision for the future of next-generation synchrotron radiation science We discuss how to handle the big data produced by SPring-8, which is increasing explosively, as well as the progress of SPring-8, and what kinds of new science will be created. In addition, the 12th SPRUC Young Scientist Award ceremony was held. This year, the selection committee conferred awards on Professor Shunsuke Kitou from the University of Tokyo, and Professor Ken-ichi Otake from Kyoto University. The upcoming SPring-8 Symposium in 2024 will be held at Kyusyu University.

SPRUC supported the "SPring-8 Summer School" held on July 9–12 for enhancing users' research competency, and hosted the "SPring-8 Autumn School" on September 10–13 with JASRI for acquiring new users and developing human resources. SPring-8 Summer School is an event using SPring-8 and consists of lectures and practical training, mainly targeted at graduate students in master's courses. In contrast, the SPring-8 Autumn School targets third- and fourth-year students, graduate students, and researchers from companies, which is open to those who are not registered as radiation workers. The SPRUC research groups contributed to the planning of lectures at the Autumn School. This year, 76 participants attended lectures and underwent simulated hands-on training at SPring-8.



SPRUC2023 Young Scientist Award Prof. M. Oshima, Prof. K. Otake, Prof. E. Nishibori, and Prof. S. Kitou

SPRUC hosted the sixth beamline upgrade workshop on February 29 with RIKEN and JASRI, as in previous years. In the workshop, the beamlines (BL08W, BL13XU, and BL46XU) that completed upgrades and related research groups presented their recent status and feedback. This was followed by the reporting of the progress of beamline reorganizations (BL04B2, BL15XU, BL39XU, and BL40XU). We shared the progress of ongoing beamline upgrades, the development of new equipment and methods, the latest information on SPring-8-II and the SPring-8 Data Center, and requests from research groups as well as proposals for future beamline upgrades toward SPring-8-II to exchange opinions among facilities and users.

The sixth-term SPRUC research groups were voluntarily organized in each research field, and comprised 35 research groups. The research groups actively held meetings to collect ideas and determined the need for beamline upgrades in each research field. This year, most research meetings were held face-to-face, rather than online. SPRUC calls for the application of seventh-term SPRUC research groups, as of March 4. The next term of research groups begins with a review process in April.



SPring-8 Symposium 2023

## **VIII. Outreach Activities**

To reach new users in unexplored application fields, SPring-8 holds various serialized seminars named "Workshop on Advanced Techniques and Applications at SPring-8." Representative examples are as follows:

- 89th: Synchrotron Radiation and Neutron Beam Joint Usage Workshop April 26, 2023
  Video conference
- 94th: Current Status and Future of Protein Structural Biology Research at SPring-8 September 25 and 26, 2023
  Osaka University
- 92nd: Cutting-Edge of SiC Power Device Development in Synchrotron Radiation November 29, 2023
  Shin-Osaka Brick Building