

Welcome to the 16th International School and Symposium on Synchrotron Radiation in Natural Science



The International School and Symposium on Synchrotron Radiation in Natural Science (ISSRNS) gathers synchrotron radiation users from Poland and abroad for over 30 years. The 1st ISSRNS was organized by the Polish Synchrotron Radiation Society (PSRS) in 1992. Its chairs were prof. Julian Auleytner from Institute of Physics PAS in Warsaw and prof. Andrzej Kisiel from the Jagiellonian University in Krakow, both the outstanding scientists, group leaders and users of synchrotron radiation. On their initiative, a year earlier during the first National Symposium of Users of Synchrotron Radiation in Przegorzały the PSRS was established. The main aim of the Society had been the popularization of research with the use of synchrotrons. It was done by the regular organization of scientific schools during which participants could learn about the synchrotrons and synchrotron radiation as well as to obtain information what kind of research can be performed and where. The conferences had helped to bring together Polish scientists interested in using synchrotron radiation and created a forum not only for learning about techniques but also for exchanging experiences in practical matters. From the beginning the scientists from major synchrotron centers have been invited to share their knowledge and expertise. After more than 30 years Polish scientists are a part of a synchrotron world but the ISSRNS conferences are still a place to learn about fascinating science and new techniques, to meet interesting scientists from all over the world, establish new collaborations and discuss ones results.

The ISSRNS conferences are organized by members of the PSRS from different scientific centers in Poland. Their location changes from little mountain resorts to big cities like Warsaw or Krakow. This year, the 16th ISSRNS is organized by the Institute of Physics, Polish Academy of Sciences, in Szczyrk, a mountain resort in the south of Poland.

Thanks to the effort of PSRS represented by prof. Krystyna Jabłońska from Institute of Physics PAS, Poland joined the ESRF consortium as an associate member already in 2004. Since then Polish scientists can perform their research in this modern and innovative facility. From the beginning the access is ensured by the grants of Ministry of Science and Higher Education. The recent one is titled "*Polish contribution to the European Synchrotron Radiation Center*" (agreement No. 2021/WK/11) and it also offers funding for participation in conferences for scientists with Polish affiliation presenting the results of research conducted at the ESRF. In addition, current grant supports the organization of the 16th ISSRNS conference, which provides a good

occasion to organize a special session dedicated to the ESRF-EBS to show supreme opportunities for the exploration of materials and living matter in a very wide variety of fields which are open to the scientific community after the recent upgrade.

Poland also belongs to the XFEL consortium. The Network of Excellence XFEL Centers was established in order to provide support to the Polish scientific community in utilizing the European XFEL. Within this intention the XFEL session is organized, to show and promote time-resolved research and give space for the users to discuss their ideas.

From the beginning, one of the goals of the PSRS had been to initiate and support initiatives leading to the construction of a Polish synchrotron radiation source. It was successful and in 2018 SOLARIS National Synchrotron Radiation Centre in Kraków welcomed first users. During our meeting you can learn about the research conducted there which will be presented by the users as well as the beamline scientists.

We also give floor to the winners of the Polish Synchrotron Radiation Society Award from the fourth and fifth edition for the best PhD thesis and publications containing the results of research using synchrotron radiation or free electron lasers.

We welcome all participants. I believe you would find exciting science here, nice place to share and discuss your research, form new acquaintances and get new ideas.

Conference Chair
Anna Wolska