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Contact:

ISSRNS 2014
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Abstract submission deadline:

April 15th, 2014

(After this date, please contact the Conference Office)

Registration and regular payment
Deadline

May 15th, 2014

CONFERENCE OFFICE

Agnieszka Jędrzejewska - *Office Secretary*
Maciej Zajączkowski - *Local Affairs*



12th International School and Symposium
on Synchrotron Radiation
in Natural Science
(ISSRNS 2014)

June 15-20, 2014

Warsaw, Poland

Organized by
Polish Synchrotron Radiation Society
in cooperation with
Institute of Physics PAS
and
National Centre for Nuclear Research



<http://issrns2014.ncbj.gov.pl>

SCOPE OF ISSRNS 2014

ISSRNS is a traditional forum for discussing fundamental issues of application of the synchrotron radiation and related methods in natural sciences. The aim of this interdisciplinary meeting is to bring together scientists working with synchrotron radiation. The Symposium focuses on novel applications of synchrotron radiation in physics, chemistry, material science, biology and medicine.

The topics of the meeting include:

- * **X-ray diffraction: methods and applications,**
- * **Macromolecular crystallography,**
- * **Structure solution in nano- and micro-scales**
- * **Elastic scattering of X-rays,**
- * **Synchrotron radiation in nanoscience,**
- * **Imaging, holography, spectroscopic mapping,**
- * **X-ray absorption, fluorescence and photoelectron spectroscopies,**
- * **X-ray magnetic dichroism,**
- * **Synchrotron radiation at long wavelengths (THz, IR and VUV),**
- * **Synchrotron radiation in life sciences and medicine,**
- * **Novel applications of Free Electron Lasers,**
- * **Synchrotron and alternative radiation sources - new developments and instrumentation,**
- * **Advanced optics, irradiation damage and metrology of intense beams**

The scientific programme of the Symposium includes invited general lectures, orals and poster sessions.

The year 2014 has been declared by the United Nations as the International Year of Crystallography. This fact will be honoured at the ISSRNS 2014 by a special session devoted to recent advances in the discipline, whose progress is strictly related to the development of modern SR sources - synchrotrons and short-wavelength FELs.

In Poland, the first national synchrotron SOLARIS in Krakow is under construction, to be operational in late 2014. A concept of POLFEL, the Polish free electron laser proposed to be constructed at National Center for Nuclear Research in Otwock/Świerk also reaches its maturity. These facts will pronouncedly extend the program of the incoming meeting beyond its traditional topics to promote integration of the SR community of users, designers and constructors of the advanced synchrotron sources.

ABSTRACTS

The regular abstract length should not exceeded one page. Authors proposing to present their contribution in the oral form are encouraged to submit an extended abstract. Up to 3 pages of the extended abstract will be accepted. Further details of preparing the abstracts can be found on the conference website:

<http://issrns2014.ncbj.gov.pl>

PUBLICATION

Proceedings will be traditionally published in a special volume of the Radiation Physics and Chemistry (Elsevier). The abstracts will appear in a special issue of the PTPS bulletin.

LANGUAGE

The official language of the Symposium is English.

LOCATION

The meeting will be held in a comfortable HOTEL BOSS which is a new fully-equipped three-star object. It is situated on the edge of the Mazovian Landscape Park, which is a large (c.a. 160 sq. km), natural remnant of much greater ancient forest.

PAYMENT

The deadline for the payment is **May 15, 2014**.

Conference fee including full board and accommodation:

Regular (double room)	2000 PLN
Regular PTPS members (double room)	1800 PLN
Regular student (double room)	1600 PLN
Accompanying person	1800 PLN
Additional payment for single room	400 PLN

The Scientific Committee of the ISSRNS 2014 offers a limited number of partial financial support for some participants. For detailed information, please, refer to the conference website.

CONFIRMED INVITED LECTURERS:

Anton Barty, CFEL, Germany, *Introduction to x-ray diffraction with use of FEL sources*

Carlo Bocchetta, SOLARIS, Poland, *Free Electron Lasers vs. Storage Rings – a future of the Large Scale Light Sources*

Elke Bräuer-Krisch, ESRF, France, *Microbeam radiation therapy and other therapies with synchrotron radiation*

Alessia Cedola, Rome, Italy, *3D visualization of tissue by x-ray microdiffraction and phase contrast tomography*

Marie-Emmanuelle Couprie, SOLEIL, France, *New generation of light sources: Present and future*

Mikael Eriksson MAXLAB, Sweden, *MAX IV, The World's Brightest Synchrotron Radiation Source*

Charles Fadley, LBNL, USA, *New directions in hard and soft x-ray photoemission with synchrotron radiation*

Francois Fauth, ALBA, Spain, *Powder diffraction and X-ray Absorption Spectroscopy at ALBA synchrotron source*

Wojciech Gawelda, XFEL, Germany, *Chemical reaction dynamics investigation with FELs and storage rings*

Jerry Hastings, SLAC, USA,

Jozef Keckes, Leoben, Austria *X-ray diffraction characterization of strains and microstructure in nanostructured thin films*

Maya Kiskinova, Elettra, Italy, *Complex Materials and Nanostructures by Synchrotron-based Spectromicroscopy and Imaging*

Jacek Krzywinski, LCLS, USA,

Andrea Locatelli, ELETTRA, Italy, *LEEM and XPEEM to watch graphen at different substrates*

Anders Madsen, EU-XFEL, Germany, *Structural dynamics investigated by coherent X-ray scattering*

Claudio Masciovecchio, ELETTRA, Italy, *FERMI seeded FEL*

Alke Meents, PETRA III, Germany, *High-resolution x-ray phase contrast microscopy with tender X-rays*

Mohammed Mezouar, ESRF, France, *Synchrotron radiation for science under extreme conditions of pressure and temperature*

Martin Meedom Nielsen, DTU, Denmark, *Time-resolved x-ray scattering in molecular liquids*

Lukasz Plucinski, FZ Jülich, Germany, *Spin-polarized ARPES*

Pantaleo Raimondi, ESRF, France, *ESRF Upgrade Phase II*

Andrei Rogalev, ESRF, France, *Recent achievements in XMCD with synchrotron radiation*

Wojciech Rypniewski, Poznan, Poland, *RNA biostructural studies (Exact title will be precised later)*

Marcin Sikora, AGH, Poland, *RIXS-MCD as a sensitive probe of 3d magnetism with hard x-rays*

Marek Stankiewicz, SOLARIS, Poland, *Present status and future development of SOLARIS project*

Ivan Vartaniants, Hamburg, Germany, *X-ray scattering methods for the study of disordered systems. New opportunities and challenges*

Przemyslaw Wachulak, Warsaw, Poland, *EUV and soft x-ray imaging with compact, table-top laser plasma EUV and SXR sources*