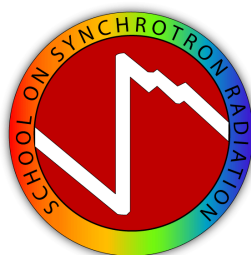




IX School on Synchrotron Radiation: Fundamentals, Methods and Applications

Duino (Trieste - Italy) 10 – 21 September 2007

FIRST CIRCULAR



DIRECTORS

Prof. Settimio MOBILIO

Department of Physics
University Roma TRE
Via della Vasca Navale 84
00046 Roma
Italy

Tel. +39 06 55177097
Fax +39 06 94032304
E-Mail: Mobilio@fis.uniroma3.it

Prof. Gilberto VLAIC

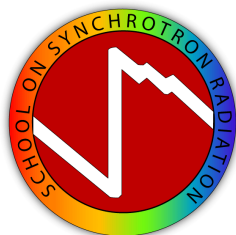
Department of Chemistry
University of Trieste
Via Giorgieri 1
34127 Trieste
Italy

and

Tel. +39 040 3758030
Fax +39 040 3758565
E-Mail: vlaic@elettra.trieste.it

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Aims of the School

The Italian Society of Synchrotron Radiation (SILS) in collaboration with Sincrotrone Trieste SCpA synchrotron radiation facility Elettra organizes in September the IX edition of the School "Synchrotron Radiation: Fundamentals, Methods and Applications".

The previous seven editions of the School were organized by SILS at S. Margherita di Pula in Sardinia and the VIII at the Frascati Laboratory of the INFN.

The present edition will be held at Duino, in the nearby of Trieste (Italy), where the III generation synchrotron Italian radiation facility Elettra is operative since twelve years.

The School will give a general overview of the characteristics and potentiality of Synchrotron Radiation to graduated students and young researchers interested in its use. The emission of Synchrotron Radiation both from the storage rings and from free electron lasers, its properties, most of the experimental methods used, their fundamentals and applications in Physics, Chemistry, Biology, Earth Science and Material Science will be illustrated.

Data analysis sessions as well as experimental training on some of the ELETTRA beam-lines are also foreseen.

The lectures will be given in English.

Topics

The main topics will be:

- Production and properties of Synchrotron Radiation;
- Description of the facilities around the world;
- Basic of the interaction between matter and radiation;
- X-Ray Absorption Spectroscopy (EXAFS and XANES)
- X-ray Diffraction (from single crystal, from powder, in anomalous scattering condition)
- Microscopy and micro-spectroscopy;
- Photoemission spectroscopy (from valence band and from core levels)
- Angular, time and spin resolved photoemission
- Small angle scattering
- Inelastic X-ray scattering
- Resonant spectroscopy and diffraction techniques;
 - Dichroism
 - Free electron laser;
- Applications to bio-molecules, magnetic materials, catalysts, surfaces;

Participant are encouraged to present a poster on their research activity and interest toward synchrotron radiation, in order to facilitate exchange of ideas and collaborations among participants.

The detailed programme of the lectures will be sent to participants together with notification of the acceptance to the school.

Applications

Participants will be limited to 50. To participate the enclosed application form shall be send to the secretary within next June the 15th. The selection of the participants will be based on the time of the arrival of applications.

The fee is fixed to 250,00 euro; it includes the attendance to the lectures, a copy of the lecture notes, the participation to the social excursion, transportation at arrival, departure and to ELETTRA. for the practical sessions.

Deadlines

Application forms shall be received within 15/6/2007, through the WEB site of the School (www.Elettra.Trieste.it). A link can be found also at the WEB site of the SILS (www.fis.uniroma3.it/sils).

Participants shall be informed on the acceptance of their application by E.mail within 30/6/2007.

Registration fee shall be paid within 20/7/2007.

Accommodation at the Holiday Inn Hotel shall be confirmed to the secretary within 20/7/2007.

"Carla Cauletti" Fellowships

As in the previous editions, the SILS will grant some fellowships to facilitate participation to the School. Fellowship will cover the registration fee and, in selected cases, will partly cover the accommodation.

Fellowships are entitled to Carla Cauletti, an Italian chemist pioneer in the use of synchrotron radiation.

Site of the School

Lectures will be given at the Duino Castle, 34013 Duino Aurisina (Trieste, Italy). Visit the site <http://www.castellodiduino.it/> for more information.

Hotel Accommodation

On request the secretary will arrange accommodation for participants at the Hotel Holiday Inn, via Duino 78 34013 Duino (Trieste) (tel. +39-040208273), which is in the nearby of the Duino Castle.

The participants of the School will have a special fare of 35,00 euro/person/night in double room, 60,00 euro/night in single room, breakfast included.

Participants can have lunch and dinner at the Hotel at the special fare of 15,00/euro/person/meal plus beverages.

Participants shall pay the Hotel themselves.

Useful information

During September the weather in Trieste is generally sunny, with a mean temperature between 17 and 23 degrees.