The 7th AOFSRR School

Cheiron School 2013

SPring-8, Japan

September 24th (Tue) - October 3rd (Thu)

Joint School of AOFSRR 2013 Workshop at Himeji (September 21st - 23rd)

Organizers: AOFSRR, RIKEN, JASRI, KEK

The Cheiron-School's main aim is to provide useful and basic knowledge as well as perspectives of synchrotron radiation science and technology for graduate students, postdoctoral fellows, young scientists and engineers who wish to pursue their career in a field requiring synchrotron radiation and join a synchrotron radiation facility in the Asia Oceania region.

School Curriculum

Lectures

Overview of Synchrotron Radiation
X-ray Free Electron Laser
Ring Accelerator Physics
Light Source - Insertion Devices
X-ray Monochromator, Mirror, and Multilayer Optics
Micro-Focusing Optics
Beamline Design
Detectors

Major Experimental Techniques
Diffraction and Scattering
Soft and Hard X-ray Microscopy
XAFS/XANES
Inelastic X-ray Scattering
Pump-Probe Experiment
Infrared

X-ray Applications:
Powder Diffraction
Small-Angle Scattering
Protein Crystallography
Medical Imaging
X-ray Fluorescence Analysis

VUV/Soft-X-ray Applications:
Photoemission - Spectroscopy and Microscopy
Absorption Spectroscopy and Resonant Scattering

Meet the Experts

Round table discussion course with the lecturers and SR engineers about the practical specific activities at the home facilities

Beamline Control
Design of Soft X-ray Beamline Optics
Design of X-ray Beamline Optics
Fluorescence Analysis and Imaging
High-pressure Techniques

Powder X-ray Diffraction
Protein Crystallography
Single-crystal X-ray Diffraction
Small-angle X-ray Scattering
SR-based Nanoscience
Surface and Interface Diffraction

Time-resolved Techniques
X-ray Imaging
X-ray Free Electron Laser
Infrared

SX-MCD and X-MCD

Beamline Practicals

More than 20 laboratory courses (beamline practicals) on the application sciences, etc. using SPring-8 facilities
LEEM/PEEM at Soft X-ray Beamline
High-pressure Experiment
Powder Diffraction
X-ray Photoemission Spectroscopy

Asia Oceania Week

XAFS/XANES Measurement
Pump and Probe Technique
Beam Diagnostics
Small-angle Scattering
Surface X-ray Diffraction Measurements

Protein Crystallography X-ray Imaging Infrared More...

http://cheiron2013.spring8.or.jp