

Evaluation of Synchrotron Mössbauer Spectroscopy Data using the CONUSS software

Location and Time

The workshop will take place at the Advanced Photon Source, Argonne National Laboratory, on October 29-30, 2005. Accommodations are arranged at the Argonne Guest House.

Workshop goals

This two day workshop is organized within the COMPRES infrastructure development initiative. This initiative is aimed at creating state-of-the-art Nuclear Resonant Scattering (NRS) techniques for characterizing the properties of materials under high P-T conditions of planetary interiors.

NRS techniques fall into two broad areas:

Synchrotron Mössbauer Spectroscopy (SMS) provides information on magnetic properties and valence state of iron in minerals and high-pressure phases. It is also sensitive to solid-melt transitions.

Nuclear Resonant Inelastic X-ray Scattering (NRIXS) provides information on vibrational and elastic properties, e.g. sound velocities

During the workshop we intend to

- provide a basic introduction of SMS to the Earth science community,
- introduce the CONUSS software for SMS data evaluation,
- provide “hands on” training in the use of the CONUSS software,
- address common experimental issues confronting users.

Organizing Committee

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