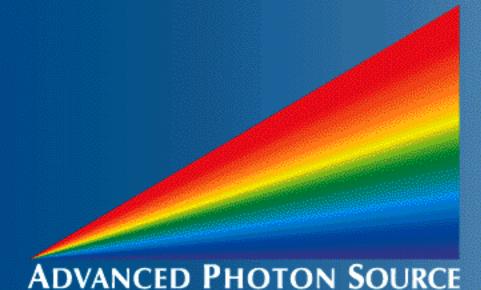
# ADVANCED PHOTON SOURCE ARGONNE NATIONAL LABORATORY



### News

BIOLOGICAL SCIEN

MATERIALS SCIENCE

X-RAY INSTRUMENTATION

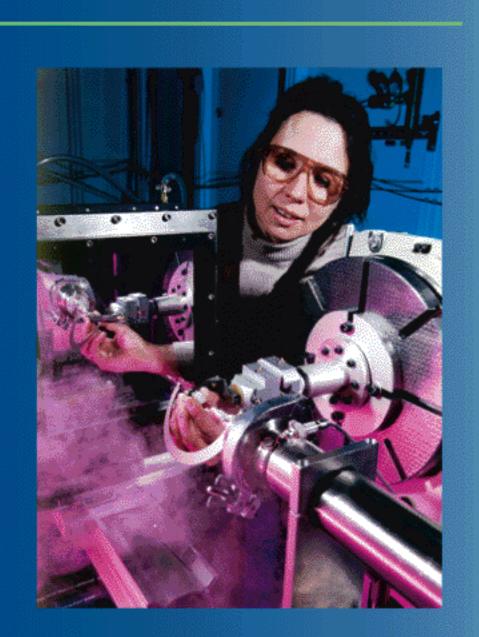
MOLECULAR

**ATOMIC PHYSICS** 

#### Increased Availability and Beam Time for **APS General Users**

New structural biology beamlines and the inauguration of mail-in crystallography capabilities are the latest developments in the evolution of the protein crystallography program at the Advanced Photon Source (APS).

The two new protein crystallography beamlines (8-BM, operated by NE-CAT, and 22-ID, operated by SER-CAT) have completed their commissioning and are now open for proposals from general users. The APS is also initiating a mail-in crystallography service for general users on 31-ID (SGX-CAT). More information on the capabilities of all of these beamlines can be found at www.aps.anl.gov/ user/beamtime/get\_beam.html.



#### XOR Expands Accesss to APS Beamlines

Access to APS beamlines funded, like the APS itself, by the DOE's Office of Basic Energy Sciences (BES) has more than tripled since those beamlines came under the auspices of the X-ray Operations and Research (XOR) group in Argonne's Experimental Facilities Division. It's all part of a concerted effort by APS and DOE to make this national scientific asset even more open to experimenters whose research proposals can pass a competitive, peer-reviewed proposal evaluation process. When the APS began operations in 1996, 25 percent of the research time on most beamlines was available for open, peer-reviewed research. With the creation of XOR, the availability at XOR-operated beamlines has soared to 80 percent. At the same time, the number of XOR-operated sectors has grown from four to 10 and will continue to increase.

A number of new beamlines currently under construction at the APS will be operated by XOR. These include the nanoprobe beamline for Argonne's new Center for Nanoscale Materials. The nanoprobe will be a hard x-ray microscopy beamline with the highest spatial resolution in the world.

Another innovative beamline will be a premier facility for inelastic x-ray scattering. This technique can, for example, measure the velocity of sound in liquid metals of importance to geoscience. Finally, a dedicated beamline is under construction to serve the needs of the x-ray powder diffraction community. XOR is also playing a major role in strategic planning for future scientific development at the APS to attract new groups of researchers with exciting ideas for innovative X-ray science. These concepts will be the foundation for exciting new research at the remaining, uncommitted APS beamlines.

## Call for Proposals

At the APS, our door is open to experimenters from all scientific disciplines, whose research requires the highest-brilliance hard x-ray beams in the Western Hemisphere.

General-user proposals for beam time during Run 2005-2 are due by March 11, 2005. Information on access to beam time at the APS is at: http://www.aps.anl.gov/user/beamtime/get\_beam.html or contact Dr. Dennis Mills, DMM@aps.anl.gov, 630/252-5680.

Information on APS research techniques and beamline capabilities is also at:

http://www.aps.anl.gov/user/beamtime/get\_beam.html

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**Advanced Photon Source** Bldg. 401/Rm A4128 **Argonne National Laboratory** 9700 S. Cass Ave. Argonne, IL 60439 USA apsinfo@aps.anl.gov

MENTAL SCIENCE

**PLANETARY**