

Satellite meeting on x-ray science with polarized radiation

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A two-day satellite meeting of SRI-94 on *X-ray Science with Polarized Radiation* took place at Cornell University on July 24-25, 1994. About 80 international participants enjoyed the refreshing summer weather in Ithaca, and the scientific program which included 15 invited oral presentations and about 20 contributed poster papers. The meeting reflected the increasing general interests in the synchrotron user community in studying magnetic and nonmagnetic materials using specially-polarized x-ray beams.

The meeting began with opening remarks by B.W. Batterman, the director of CHESS, and an overview on x-ray polarization phenomena by V. Belyakov (Surface & Vacuum Research Center, Russia) who gave a long list of x-ray polarization effects in ordered materials, such as magnetic scattering, resonant scattering, dynamical diffraction, nuclear Bragg scattering, and multi-beam Bragg diffraction. Other presentations were focused on specific areas of x-ray polarization science.

On the subject of *x-ray magnetic studies* there were presentations by F. de Bergevin (ESRF and Lab. de Cristallographie, France) on nonresonant and resonant magnetic scattering, E. Isaacs (AT&T Bell Labs, USA) on magnetic scattering studies of antiferromagnetic order in superconducting crystal UPt₃, M.J. Cooper (Univ. of Warwick, UK) on magnetic Compton scattering, and C.T. Chen (AT&T Bell Labs, USA) on soft-x-ray magnetic circular dichroism and its applications.

The broad area of *energy-resonant phenomena* included talks by G. Dräger (Univ. of Halle, Germany) on x-ray absorption and emission spectroscopy using linearly polarized radiation, K.D. Finkelstein (CHESS, USA) on anisotropic resonant scattering and diffraction, U. van Bürck (Univ. of München, Germany) on nuclear resonant scattering of Mössbauer and synchrotron radiation, C.C. Kao (NSLS, USA) on high resolution resonant Raman scattering, and Y. Ma (Univ. of Washington / NSLS, USA) on angle-resolved near-edge x-ray fluorescence spectroscopy as a band-structure

probe. Two presentations on theory of x-ray resonant phenomena were given by P. Carra (ESRF) and J. Hannon (Rice Univ., USA).

The topics of *special sources and optics* were covered by R. Carr (SSRL, USA) and J. Pflüger (APS/HASYLAB, Germany) on special insertion devices, T. Ishikawa (Univ. of Tokyo, Japan) on x-ray phase retarders, and C. Malgrange (Univ. of Paris, France) on the measurements of XMCD using an energy dispersive x-ray phase plate. Closing out the meeting was a summary presentation by M. Hart (Univ. of Manchester, UK) who

stressed the interconnections between theory, science, and technology in the field of x-ray polarization studies.

The meeting was fully enjoyed by all participants. A poster session and tour of CHESS was held on the first-day afternoon. In the evening, most participants attended the sunset dinner cruise on beautiful Cayuga Lake. The delightful evening event was arranged by Virginia Bizzell, the local meeting coordinator at CHESS. Her excellent organizing skills and efforts for the whole meeting were greatly appreciated by all participants.



Dusk on Cayuga Lake. A relaxing moment for C.C. Kao (NSLS, left), Qun Shen (CHESS), Roger Carr (SSRL), Dennis McWan (NSLS), and Anthony Young (LBNL).