

Alfred University Student Chapter Holds Seminar on Advanced Characterization Techniques

Although characterization techniques for advanced materials have progressed to a level of high sophistication, use of these methods lags behind the technology. To encourage more extensive application of these methods within the ceramics industry, the Materials Research Society's Student Chapter at Alfred University conducted a seminar on Advanced Characterization Techniques and Applications June 25 at the University's New York State College of Ceramics (NYSCC).

More than 90 industrial researchers and practicing and academic scientists attended the symposium, during which research specialists presented new developments in surface analysis and electron microscopy, Raman and infrared spectroscopy, thermal analysis, x-ray diffraction, available hardware and software, and recommended applications for ceramics and glass.

Five presentations explored techniques of practical value in materials development:

- "An Introduction to Characterization Methods and Their Value," James W. McCauley, dean of the NYSCC and professor of ceramic engineering;
- "Chemical and Compositional Analysis of Glass Surfaces," Carlo Pantano, Pennsylvania State University;
- "Characterization of Glasses and Ceramics using Raman and Infrared Techniques," Robert Condrate, NYSCC;
- "Thermal Analysis Techniques for Characterization of Materials," Robert Speyer, NYSCC; and



These characterization specialists conducted seminar sessions. Left to right: Carlo Pantano (Pennsylvania State University); Robert Condrate, James W. McCauley, Robert Snyder, and Robert Speyer (all of NYSCC).

- "X-ray Crystallography in Advanced Ceramics," Robert Snyder, NYSCC.

NYSCC and the Materials Research Society (MRS)—Alfred Chapter sponsored the seminar, organized by student members. James G. Fagan, Student Chapter president, coordinated the event, assisted by Hongyu Wang, vice president; Arisantano Barus, treasurer; Gert Klausen; John Wight; Walter Mason; Sumalee Likitvan-chkul; Carl Carney; and Dave Carnahan. Alexis Clare, chapter faculty advisor, served as seminar chair.

Funding for the symposium was provided through a grant from MRS and an award from Dean James W. McCauley of the NYSCC.



Grass Roots Education Session

1992 MRS Fall Meeting • Thursday, December 3, 12:05 P.M. - 1:25 P.M. • Salon A/B, Boston Marriott

Show your interest and commitment to K-12 science education by attending the Grass Roots Education Session chaired by Finley Shapiro, Drexel University and Ken Eckelmeyer, Sandia National Laboratories. The session will highlight the needs as perceived by schools and teachers, ways that technical professionals can get involved, and specific examples of successful programs and activities.

Speakers and Topics are:

Lee DeLorme, Executive Director of Engineers for Education, "Overview of U.S. Science Education, Opportunities for Involvement of Technical Professionals."

Sandra Spooner, Assistant Superintendent for Curriculum, Cambridge Public Schools, "What Kinds of Help Schools and Teachers Would Like From Scientists and Engineers."

Rob Sorenson, School Partnership Program, Sandia National Laboratories, "How Scientists and Engineers can be Effective in Science Education Enrichment: A Training Session Illustrated with Demonstrations of Effective Activities."

Plus: Look for the posters in the poster session Thursday evening displaying K-12 science activities along with sources of activities you can do with students or provide to teachers.