

## Materials Technology Transfer: Environmental Interactions

Pacific Northwest Laboratories (operated for the U.S. Department of Energy by Battelle Memorial Institute) will hold a two-day symposium on Materials Technology Transfer and Environmental Interactions on September 3-4, 1986 in Richland, WA. This is the first of a symposium series intended to make current knowledge and new developments in materials research available to industry. This symposium will also provide an opportunity for increased interaction among government laboratories, industries, and universities.

Three sessions will cover materials reliability, materials performance at high temperatures, and materials performance in aqueous solutions. A fourth session includes a tour of Pacific Northwest Laboratories and individual discussions.

Cost for the symposium is \$95. Contact M.J. Jimenez, Battelle Northwest Laboratories, P.O. Box 999, Richland, WA 99352; telephone (509) 375-2503.

## Workshop on Electron Microscopy and Microprobe Techniques in Clay Analysis

A one-day workshop on Electron Microscopy and Microprobe Techniques in Clay Analysis will be held under the auspices of the Continuing Education Committee of the Clay Minerals Society October 11, 1986. Topics will include specialized techniques for SEM, quantitative analyses of clays using an electron microprobe, and high resolution and analytical TEM. Recent techniques such as image analysis of clays, thin film analysis and high resolution structure imaging will be discussed. Utilization of novel approaches to solving clay mineralogy problems (such as electron beam damage, polytype and site occupancy determination) will also be presented. Emphasis will be on practical aspects of sample preparation, data acquisition and the limitations of data interpretation using these electron beam techniques. This workshop is intended to equip clay researchers with a current compilation and comparison of these analytical techniques and their applications.

Speakers for the workshop include C.D. Curtis (University of Sheffield), D.R. Veblen (Johns Hopkins University), B. Velde (Ecole Normal Supérieure, Paris), C.E. Lyman (Lehigh University), and I.D.R. Mackinnon (University of New Mexico, Workshop Chairman).

The cost for the workshop is \$60 for unaffiliated registrants, \$50 for Clay Minerals Society members and \$25 for

students. Registration forms and further details can be obtained from Organizing Committee, 1986 Clay Minerals Society Meeting, Attention Dr. K. Brady, Tennessee Valley Authority, T218 NFDC, Muscle Shoals, AL 35660.

## SAMPE Seeks Papers for Advanced Materials Technology '87

The Society for the Advancement of Material and Processing Engineering (SAMPE) has issued a call for papers for Advanced Materials Technology '87. Scheduled for April 6-9, 1987 in Anaheim, California, the program will be held in conjunction with the 32nd International SAMPE Symposium and Exhibition. Papers which have never been published in open literature or presented at another national convention are solicited in six topics: reinforcements, unreinforced and reinforced ceramics, reinforced metals, and unreinforced and reinforced polymers. Papers will be further classified into four categories: advanced materials technology; applications for these materials, especially space, aerospace, transportation and sports; FAR/JARR and CAA regulations of materials in aircraft fiber and fiber composite armor; new applications for high-performance fiberglass; and information which may be presented only to U.S. citizens.

Authors should submit 150-250 word abstracts by July 1, 1986 and completed papers by December 1986. Abstracts and papers must include the author's name, affiliation, business address and telephone number. Send to Ralph E. Carson, San Diego Chapter President, SAMPE, 2135 Tulip Street, San Diego, CA 92105.

## Ceramic Microstructures '86: Role of Interfaces

"Ceramic Microstructures '86: Role of Interfaces" is the subject of an international symposium to be held at the University of California-Berkeley, across the Bay from San Francisco, July 28-31, 1986. Symposia on ceramic microstructures are being held at Berkeley at ten-year intervals. The first one in 1966 emphasized the need and importance of characterization. The second one in 1976 emphasized the exploration of characters (microstructures) most suited for energy-related applications. This one deals with interfaces. New and improved analytical tools and development of greater sophistication in research approaches have emphasized the importance and provided the impetus for exploring the nature and role of grain boundaries and interphase interfaces.

Great progress has been made during the past ten years toward understanding all

aspects of ceramic microstructures. The objectives of the symposium will be to explore this progress and assess current activities and understanding. Major areas of discussion will be overviews of the current status and understanding, design of microstructures, characterization of interfaces and microstructures, ceramic-metal interfaces, microstructure development, and correlations of microstructures with electrical properties and mechanical properties and behavior. The opening talk will be presented by H. Fischmeister, Max-Planck-Institut für Metallforschung (Stuttgart, West Germany).

Among the other speakers are R.J. Brook, University of Leeds (England); G. Thomas, University of California-Berkeley; A.M. Stoneham, AERE (Harwell, England); W.D. Kingery, Massachusetts Institute of Technology; H.E. Exner, Max-Planck-Institut für Metallforschung (Stuttgart); J.T. Klomp, Philips Research Laboratories (Netherlands); H.K. Bowen, Massachusetts Institute of Technology; I.A. Aksay, University of Washington (Seattle); F.F. Lange, Rockwell International Science Center (Thousand Oaks, CA); L.E. Cross, Pennsylvania State University (University Park); J.Y. Laval, CNRS, Laboratoire des Microstructures (Paris); K. Okazaki, National Defense Academy (Japan); Z.W. Yin, Shanghai Institute of Ceramics (China); A.G. Evans, University of California-Santa Barbara; D.G. Brandon, Technion Israel Institute of Technology (Haifa); M.V. Swain, CSIRO Division of Materials Science (Victoria, Australia); and S. Somiya, Tokyo Institute of Technology (Japan).

The total program will have about 60 papers and about 40 posters; written papers for all these presentations will be included in the symposium proceedings.

The symposium will be held at the Clark Kerr Campus located five blocks from the main Berkeley campus. The Clark Kerr Campus, a recent addition, is being developed as a conference center and a housing complex for students. Housing and meals will be available on the campus, making it an ideal conference site. Rooms will also be available at several hotels in Berkeley.

The \$200 registration fee includes attendance at sessions, symposium abstracts, symposium proceedings upon publication, attendance at the official reception, attendance at the official barbecue banquet, buffet lunches at the Clark Kerr Campus and coffee break refreshments. A companion's \$35 registration fee includes attendance at the reception and the barbecue banquet. For further information, contact Peggy Little, Conference Coordinator, Building 50B, Rm. 4206, Lawrence Berkeley Laboratory, University of California, Berkeley, CA 94720; telephone (415) 486-6387; FTS: 451-6387.