

## Atomic and Molecular Processing of Electronic and Ceramic Materials Addressed at MRS Regional Conference

How can the formation of abalone shell help in our understanding of the processing of ceramics? Can electronic materials processing technologies be applied to high-tech ceramics? How can epitaxial III-V compounds best be characterized? These and related questions were the subject of an MRS-sponsored regional meeting on Atomic and Molecular Processing of Electronic and Ceramic Materials held at the University of Washington in Seattle, August 30–September 2, 1987. Attended by over 100 scientists and engineers, the meeting generated a highly successful combination of invited and poster papers, along with discussion reminiscent of a Gordon conference.

Keynote speaker Charles B. Duke of Xerox Webster Research Center opened the meeting with his perception of surface structural chemistry applied to microelectronics. Ceramics sessions at the conference dealt with molecular and biological processing and applications of these principles to ceramics and to ceramic-based composites. Electronic materials sessions dealt with epitaxial growth and processing of III-V's,



*Charles B. Duke opens meeting with keynote address on surface structural chemistry applied to microelectronics.*

including a discussion on the commonalities of MBE and MOCVD preparation. Common sessions were held dealing with new characterization techniques, focusing on the atomic force microscope and on scanning tunneling microscopy. The final session, dealing with unique materials, reviewed the current status of understanding of III-V compounds, ceramic composites, and superconducting ceramic oxides. Poster sessions added detail to the material discussed and further expanded the scope of work presented.

According to Thomas G. Stoebe, chairman of the Department of Materials Science and Engineering at the University of Washington and conference chairman, the principal speakers and

poster presenters were drawn from industry and academia all across the United States. Attendees enjoyed Seattle at its finest. At the end of a boat trip through beautiful Puget Sound, they were treated to an Indian salmon bake held at Kiana Lodge.

The meeting was organized by the Pacific Northwest Materials Council, a group representing universities and national labs in the Pacific Northwest with materials programs. The conference organizing committee included I.A. Aksay, M.J. Kaufman, W.D. Scott and T.G. Stoebe of the University of Washington; G.L. McVay of Battelle Northwest; J.T. Dickenson of Washington State University; J.F. Wager of Oregon State University; and N.G. Erer of the Oregon Graduate Center. Conference support was received from the Army Research Office, Battelle Pacific Northwest Laboratories, DARPA, Perkin-Elmer, and Pierce Nordquist Associates.

Proceedings of the meeting will be published by MRS in early 1988. Pre-publication prices, available through March 31, 1988, are \$30 for MRS members, \$35 U.S. List, and \$40 Foreign; post-publication prices are \$35, \$40, and \$47, respectively. Order from Publications Department, Materials Research Society, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; telephone (412) 367-3012.

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