

## SPRING MRS MEETING SET

### SHORT COURSES

*at the Annual Meeting*

### PLENARY SESSION

*speakers chosen*



### SPRING MEETING

*in Albuquerque*

### MORE NEWS

*briefs and features*

*First annual spring session planned  
for Albuquerque February 22-24, 1983*

The MRS has outgrown its Boston meeting.

The annual meeting in November has grown so large as to be unwieldy. A substantial increase in membership in the West has long argued for a meeting there. These and other factors have combined to convince the Society's Council to authorize a second annual meeting, to be held in the spring and in the West. The first will be held in Albuquerque next Feb. 22-24.

Program chairmen are Gordon Pike of Sandia National Labs, Ross Lemons of Los Alamos National Labs and Noble Johnson of Xerox's Palo Alto Research Center.

"This meeting was primarily initiated to relieve pressure on the November meeting caused by many good proposed symposia but limited hotel space," the chairmen say in materials prepared for the meeting. "The spring meeting is intended to become an annual, West Coast meeting that will have additional benefits. The MRS can better serve research topics where the predominant interest is at western universities and industries. For topics of widest interest, the spring meeting will provide the options of site alternation with Boston and symposia repeat time of 18 months."

#### **Four Symposia Scheduled**

Four symposia are scheduled for Albuquerque.

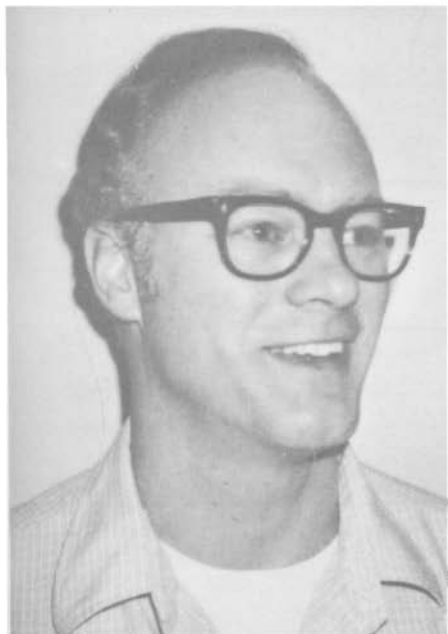
The "Better Ceramics Through Chemistry" symposium arose from the

fact that ceramic processing is no longer a *beat it and heat it* proposition. Recently, chemical processes such as sol-gel, pyrolysis and controlled precipitation have led to lower processing temperatures and greater homogenization compared with conventional ceramic processing. The exciting possibility also exists that chemical processing may permit the synthesis of a new class of ceramic materials that are simply unobtainable by such high-temperature processes as melting. The purpose of this symposium is to address all aspects of chemical synthesis of ceramics using a multi-disciplinary approach. The symposium is being organized by Jeff Brinker of Sandia National Labs, Don Ulrich of AFOSR, Dave Clark of the University of Florida and Richard Markle of Battelle, Columbus.

In the symposium entitled "Materials for Computer Displays and Printers" emphasis will be placed on the materials aspects, concerns and potentialities for these fast-evolving technologies. A goal of the organizers is to bring together scientists and engineers engaged in the development of advanced materials. Some of the topics to be covered are liquid crystals and other non-emissive flat panel displays, plasma panels, electroluminescence and phosphors for color CRTs, non-impact printing, properties of paper, inks for color.

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# SPRING MEETING IN ALBUQUERQUE



**NOBLE M. JOHNSON**

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electrophoretic materials and ion jet technologies. The chairmen are Cecil Land of Sandia Labs and Derek Dove of IBM.

## **Data Storage**

The spread of powerful computers places severe demands on the capacity and cost of data storage equipment. The symposium "Optical and Magnetic Data Storage Materials" will focus on the materials research now being conducted to meet these demands.

Optical data storage is an emerging technology for high-density, low cost-per-bit memories. Recording materials must meet the conflicting requirements of long-term stability, sensitivity, contrast and resolution. Research topics include single and multilayer films, alloys, composites, polymers and reversible materials.

Magnetic data storage has a longer history, but an equally exciting future. For magnetic materials, the emphasis is on improving density and stability while reducing cost per bit. Areas of interest include smaller magnetic particles, thin magnetic films to reduce demagnetization and increase linear



**ROSS A. LEMONS**

density, materials with perpendicular magnetization, and fabrication techniques.

Program chairmen are Geoffrey Bate of Verbatim Corp., Alan Bell of the IBM Research Center, Martin Bosch of Bell Labs, Nobutake Imamura of KDD R&D Labs and Yoshito Tsunoda of Hitachi's Central Research Lab.

The purpose of the symposium entitled "Comparison of Thin Film Transistor and SOI Technologies" is comprehensively to compare both the rapidly emerging and mature technologies available in thin-film transistor and silicon-on-insulator electronics and to provide an international forum for scientists and engineers to assess critically the current status of these technologies in addition to their projected impact on the future of electronics. There are many diverse applications in the fields of large-area systems for displays and linear arrays, high performance VLSI systems that may incorporate three-dimensional integration, and electronic systems fabricated on custom substrate materials. The technologies to be

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**GORDON E. PIKE**

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## MEETING IN ALBUQUERQUE

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compared and contrasted include SOS, beam crystallized Si, buried oxide technologies, porous Si, large grain poly-Si, a-Si:H and representative II-VI TFT technologies. The symposium will focus on the capabilities of each of these areas with the emphasis on materials, processing, circuit and systems applications.

Chairmen are Malcolm J. Thompson of Xerox and H.W. Lam of Texas Instruments.

### **Program Chairmen**

Gordon Pike is with the Electronic Properties of Materials Division of Sandia National Laboratories. His undergraduate degree in physics was taken from Carnegie-Mellon University and his Ph. D., also in physics, from the University of Pittsburgh. He joined Sandia Labs after receiving his doctorate, doing experimental research in superconductivity, ac conductivity of insulators, metal-semiconductor contacts, electronic and mass transport in inhomogeneous materials, and radiation effects in MOSFET transistors. Currently, he is studying conductive elastomers and electronic

properties of semiconductor grain boundaries, especially as they apply to ZnO varistors.

Pike helped organize the 1981 MRS symposium on semiconductor grain boundaries and edited the proceedings from that symposium. He also was chairman of the symposium on semiconductor grain boundaries for the 1982 March meeting of the American Physical Society. From 1979 until the present, he has represented the APS in its Visiting Physicist Program at universities. He is also a meeting co-chairman of the Boston meeting this year.

Ross Lemons received his Ph.D. in 1975 from Stanford University, where he invented and developed the scanning acoustic microscope.

From 1976 to 1982, he was a member of the technical staff at Bell Laboratories in Holmdel, New Jersey. His research activities there included electrochromic materials, ferroelectric-ferroelastic devices, magnetostatic wave propagation, thin film silicon crystallization and electrically amplified optical recording. He currently is group leader for electronics research at Los Alamos National Laboratory.

His service to the Society includes co-chairing the 1982 symposium on laser solid interactions and transient thermal processing of materials and serving on the Finance Committee.

Noble Johnson is a member of the research staff of the Xerox Palo Alto Research Center. His degrees include a Ph.D. in electrical engineering from Princeton, M.S. in electrical engineering from the University of California, Davis, and B.S. from Davis as well.

After receiving his doctorate, Johnson joined the radiation physics group of the Poulter Laboratory of SRI International. He was a Research Associate of Princeton University, and in 1970 was a Technical Summer Employee of the RCA Research Laboratories in Princeton.

Johnson is co-chairman of the symposium, "Energy Beam-Solid Interactions and Transient Thermal Processing," at this year's Boston meeting of the MRS.

The meeting hotel is Albuquerque's Marriott Hotel. Further information about the meeting will be forthcoming from the Society's Secretariat, and reported in the *Bulletin*.