

SPRING MRS MEETING SET

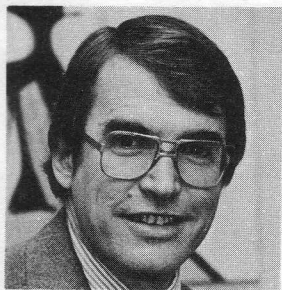
*First annual spring session planned
for Albuquerque February 22-24, 1983*

SHORT COURSES

at the Annual Meeting

PLENARY SESSION

speakers chosen



SPRING MEETING

in Albuquerque

MORE NEWS

briefs and features

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,

[Continued on Page 7]

A NOTE OF THANKS

We received the following communication from a friend:

While outwardly my colleagues were unchanged, a certain squint of eye, a certain tiredness betrayed the fact that inwardly they had been consumed.

The day was Thursday, November the Eleventh. The place was Boston. A hotel corridor, in disarray. Part of which disorder was my colleagues - Lynn Boatner, Elton Kaufmann and Leroy Chang. The origin of their distress was obvious - they had just finished their year as program co-chairmen.

The telephone rang. The clamor was scarcely noticeable in the tumult of that hallway, and yet tiredly one of them - I forget which; they seemed to have taken on a multiple personality - picked up the receiver and muttered reassurances to an unknown symposium chairman. The others nodded absently, silently mouthing the advice the speaker was conveying.

"Excuse me, Lynn," I said hesitantly, extending my hand to the one of them I knew best. I meant to congratulate him on an excellent meeting. I imagined he had worked hard to help make it a success, and I wanted him to know I appreciated it.

"Oh,hi!" he said gamely, extending his own limp hand. He began at once to radiate confident leadership. Like Christmas tree bulbs his companions blinked on. They stood up, smiling. They accepted my praise like a familiar overcoat, one to which they were accustomed. They looked immediately beyond it, to what I was really after. They suspected I was about to let them down. Or already had, more likely.

To fail to fulfill that small obligation I had undertaken at their behest. It was written all over them. They had given me something to do, but they couldn't remember what. Not that it mattered; the meeting was over. Still, they had a certain restiveness that had been absent before I came. I felt guilty. It was an emotion they had evidently much inspired of late.

It made them begin to relax. They

remembered it was over. They exchanged a smile.

It was Kaufmann who, soft as a conspirator, said, "It was a wonderful experience." The other two nodded. I didn't answer him. I was trying to draw him out. It didn't take long. "See, this guy at the lab *said* he would help me out. But . . ."

Language failed him. He conveyed by gesture an attitude I was quick to apprehend. It doesn't bear mention. You are surely familiar with it.

Chang chimed in. "We had some disappointments," he said.

My colleagues sat silently for a moment. A few straggling scientists came by to offer their congratulations. My friends switched on each time, then comfortably off again.

"An awful lot of work got done here," one of the three observed. He extended his arm to embrace, not the three, but

the rest of us. We all nodded.

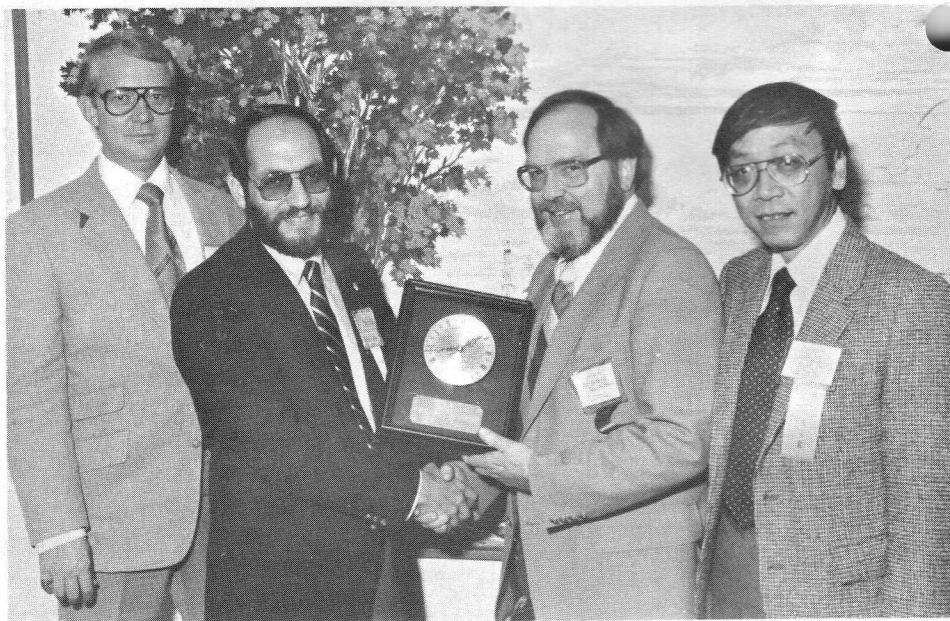
"It's been very satisfying," Boatner mused. "It's very gratifying to organize something as complex as this and then, with the help of almost countless other people, be able to pull it off."

Kaufmann said, "The symposia chairmen; since you're writing this down, we ought to give them a plug."

My friend Lynn Boatner smiled wanly. "This is a once-in-a-lifetime experience." "You can say that again," said the others.

How extraordinary! I reflected as I flew home from Boston, that my colleagues would take themselves away from their labs and their own research, and for no reward but a stronger profession. We ought to do something to recognize these fellows for all their work, but I don't know exactly what it might be.

Perhaps you can think of something.



1982 PROGRAM CO-CHAIRMEN Lynn Boatner (left), Elton Kaufmann (dark jacket) and Leroy Chang (right) present University of New Mexico Professor Doug Brookins with a token of their appreciation - a clock that runs backward, so the time remaining before deadlines appears to increase. of fifteen months, the people rarely heard from begin to stand out,' Kaufmann said. 'Of course the fear is there that their silence means nothing is being done - but in Doug's case he simply did need our help to meet all the deadlines and produce an excellent meeting.' Brookins chaired the symposium on radwaste management.

MRS SHORT COURSES

A short course on liquid phase epitaxy techniques proved so popular at last year's annual meeting it will be repeated at this year's. Two other short courses will be offered, as well.

The course program was organized by L.C. Feldman of Bell Laboratories, chairman of the Society's Education Committee. He noted the topics selected are those in which the most interest has been shown.

Liquid Phase Epitaxy

The short course in liquid phase epitaxy techniques is designed to present the practical aspects of epitaxial crystal growth using the LPE technique, with emphasis on application to III-V compound semiconductors. The course is designed primarily for those who wish to be involved with LPE in the laboratory, but have little experience with the problems involved. It should be useful for those in research and industrial environments.

Areas to be covered include the basic relevant thermodynamics, materials for which the technique is applicable, various system designs and growth procedures, growth kinetics, and some approaches to elementary characterization. Some discussion of the limitations of LPE and a brief comparison with competing techniques, such as CVD and MBE, will be made. If there is sufficient interest, an evening session will be arranged to discuss individual attendees' specific growth needs and problems. Notes will be provided.

The instructor is L.R. Dawson of Sandia National Laboratories, who taught it at the 1982 annual meeting. He has been actively engaged in LPE growth of compound semiconductor materials for 17 years. He obtained his B.S. from the California Institute of Technology and his M.S. and Ph.D. degrees from the University of Southern California. He spent eight years at Bell Laboratories and is now involved in materials research at Sandia. He has used the LPE technique for the growth of a wide range of III-V compounds, including

GaAs, AlGaAs, GaP, InP and GaSb, and for a broad range of device applications including Gunn devices, light emitting diodes, field effect and bipolar transistors, lasers and optical detectors.

Surface Analysis

The course on surface analysis techniques will present the conceptual and practical aspects of modern surface and thin-film analysis techniques. The main purpose is to present the principles underlying the various materials-analysis techniques and their practical capabilities. The course will cover sputter-Auger analysis, X-ray photoelectron spectroscopy (X.P.S.), secondary ion mass spectroscopy (SIMS), Rutherford backscattering and channeling (RBS), electron-microprobe and other analysis techniques. The course is designed for all people concerned with modern materials analysis. At its completion, a student should be able to make an informed decision on the analytical technique applicable to a given problem.

The instructors are James W. Mayer of Cornell University and Feldman of Bell Labs. Each has had extensive experience in a range of problems concerned with surface analysis. Each also has had extensive experience in course development and instruction on this subject.

Mayer is a leader in the fields of thin-film science and technology. He has been employed at Hughes Research Labs, California Institute of Technology, and Cornell, which he joined in 1980, and where he holds the Bard chair in Materials Science. In 1981 Mayer was chosen by the Materials Research Society to receive its highest honor, the Von Hippel Award. Feldman has been a member of the technical staff at Bell Labs since 1967. He has played a leading role in the development of ion scattering/surface science techniques and their comparison to other surface science probes.

Ion Implantation

The course entitled Ion Implantation: Principles and Practice is designed for scientists, engineers and technicians who are or will be involved in ion implantation. The curriculum will cover the fundamental techniques of ion implantation, the application of this technique to materials and the practical aspects of ion implantation equipment. The basic concepts of ion ranges and ion bombardment damage will be covered. Students will learn of the underlying concepts as well as sources of implantation information, such as range tables and damage profile compilations. There will be extensive discussion of ion implantation equipment. This will include discussion of various types of implantation machines, questions concerned with beam integration and implantation uniformity, vacuum requirements and so on. Applications will center on the fields of semiconductor doping and modification of the near surface properties of metals. The discussion of semiconductors will include annealing techniques. Metals applications will be concerned with the modification of the wear and corrosion properties of metal components.

The instructor is J. Hirvonen, vice president and technical director of Zymet Inc. He was formerly employed at the Naval Research Laboratories, where he formed one of the most active and successful implantation programs in the United States. He is a leader in the field of ion implantation equipment and its unique applications to materials science and current materials problems.

Each of the three short course is planned for two days. Registration materials are being developed, and will be forwarded to members by the Secretariat. Non-members should request information at the following address:

MRS Secretariat
Ernest M. Hawk
110 Materials Research Laboratory
University Park, PA 16802

KEYWORTH, BEILMAN TO ADDRESS SOCIETY

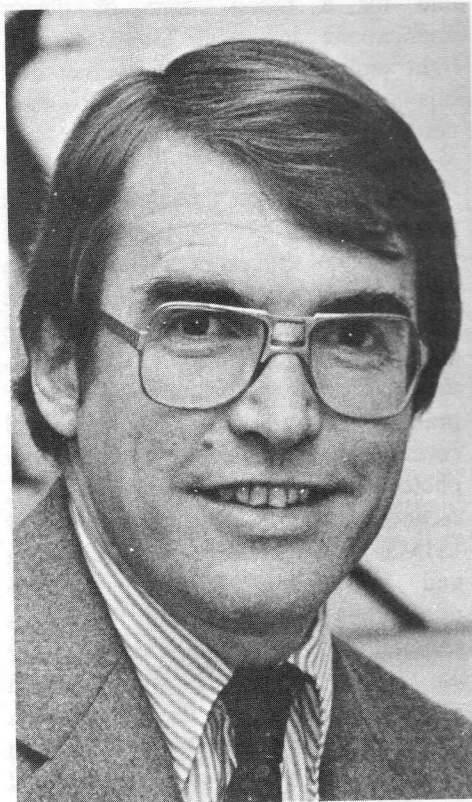
Again this year an all-Society Plenary Session has been arranged for the Monday of the MRS annual meeting in Boston. Immediately following the technical sessions (i.e., at 5:30 p.m.), it will offer all meeting participants an opportunity to hear the views of prominent speakers on issues of general interest to the materials research community. We are pleased to announce that this year's speakers include Donald S. Beilman, President of the Microelectronics Center of North Carolina and George A. Keyworth, Science Adviser to the President of the United States and Director of the federal Office of Science and Technology Policy. "The Role of Industries, Governments and Universities in the Support and the Performance of Materials Research" will be addressed from each speaker's unique perspective.

Donald Beilman

Donald Beilman, who now heads a center that is the embodiment of an industry/government/university joint venture, left Cornell in 1954 with an electrical engineering degree to begin a 28-year association with General Electric Company. Throughout those years he managed and directed research for several divisions of GE and was vice president, technical systems electronics planning in September of 1982, when he assumed his present position. New algorithms for the pooling of once disparate sources of support are becoming more common and Mr. Beilman is in an excellent position to help us understand the potential effect of these on high technology research and development.

George Keyworth

George Keyworth received degrees in physics from Yale and Duke Universities and joined the research staff at the Los Alamos Scientific Laboratory in 1968, pursuing fundamental nuclear physics studies. After assuming leadership in 1974 of the Los Alamos program in nuclear



George Keyworth

and fundamental interaction physics, he became, in 1978, head of the experimental physics division. After nomination by President Reagan and confirmation by the U.S. Senate, he assumed the duties of Science Adviser to the President and Director of OSTP in August, 1981. Dr. Keyworth, having examined the special role of the national laboratories and studied the potential of the independent research institute as an alternative for the future, has influenced federal government policies affecting both. The MRS is honored that he has accepted our invitation to present his views on a topic of such importance to our members.

The Plenary speakers, as is our custom, will close their formal session by fielding questions from the audience. A reception for all those in attendance follows where, as has also been our custom, lively discussions of issues



Donald Beilman

raised by our speakers continues. Questions regarding the Plenary Session may be referred to Elton Kaufmann of the Lawrence Livermore National Laboratory, who will chair the proceedings.

Correction: The last issue of this *Bulletin* (Jan./Feb. 1983) contained an error. It was erroneously reported on page 19 that Paul Percy, Jagdish Narayan, and Walter Brown are the organizers of the Albuquerque meeting. In fact, they have been named organizers of the annual meeting to be held in Boston in 1984. Their plans for this meeting will be featured in a forthcoming issue of the *Bulletin*. The organizers of the upcoming Albuquerque meeting are profiled in this issue.

HIGH-PRESSURE CONFERENCE

MRS co-sponsors AIRAPT meeting

The MRS will co-sponsor the Ninth AIRAPT International High-Pressure Conference, to be held July 25-28 at the State University of New York in Albany. AIRAPT is the acronym of the International Association for the Advancement of High Pressure Science and Technology.

"There was unanimous enthusiasm among the Organizing Committee of the AIRAPT meeting for MRS sponsorship," said R.K. MacCrone, professor of materials science at Rensselaer Polytechnic Institute, and a member of the committee. He said AIRAPT views the collaboration of the two societies on the conference as the first step in a continuing relationship of shared meetings on topics of mutual interest. He noted the MRS will include the proceedings of the conference in its own Proceedings Series.

The Albany conference is being organized by a joint U.S.-Canada committee, and its sponsors in addition to AIRAPT and the MRS include the host university, government agencies and several industrial concerns. The program will consist of general sessions on all aspects of high-pressure research in science and technology, and specialized symposia on collective phenomena at high pressure, electronic transport properties in solids at high pressure, fluids under high pressure and high-pressure engineering and safety.

Call for Papers

General inquiries should be made to Prof. Clarke G. Homan, Department of Physics, State University of New York, Albany, NY 12222.

The general sessions will cover all aspects of high pressure in science and technology. They will be organized by a committee chaired by Norris Keller, 4452 Eads, La Jolla, CA. Panel discussions will be held on the pressure scale, organized by V. Bean; on high-pressure safety, organized by G.J. Mraz; and on high-pressure data, organized by L. Merrill.

Four symposia are planned.

Collective Phenomena

Collective phenomena are an amplified manifestation of interactions between particles. Consequently their study as a function of pressure provides a fascinating and powerful probe into interparticle interactions of all kinds. In many instances kinetics and dynamics are involved, which adds to the fascination and complexity of the subject.

The symposium Collective Phenomena at High Pressures will attempt to bring together the workers in this field for a coherent discussion of collective phenomena and the various dependencies - on pressure, primarily - in a series of review papers interspersed with the latest experimental and theoretical results. Topics include charge density waves, ferroelectricity, magnetism and superconductivity.

Contributions of oral and poster papers will be considered by the co-chairmen, C.G. Homan and MacCrone. Write to:

R.K. MacCrone
Material Science Department
Rensselaer Polytechnic Institute
Troy, NY 12181

Electronic Transport

Transport of charge and momentum in solids by electrons and holes obviously depends upon the freedom or binding of the electrons. The states and degree of binding that are possible depend upon the structure and the free volume available. Application of high pressure decreases the free volume available to the electron systems and changes the mobility - sometimes drastically, as in phase transitions.

The purpose of the symposium, Electronic Transport Phenomena in Solids at High Pressure, is to bring together experimental and theoretical workers in this field to present, discuss and correlate relatively recent observations and developments with the aim of a better understanding of the behavior of matter over a wide range of

density. The subject area will be limited to solid specimens under static or dynamic pressure at temperatures ranging from high to low, and possibly subject to superimposed conditions such as electric, magnetic or sonic fields, or to theoretical considerations applying to such conditions.

Invited speakers include K.-J. Dunn, University of California, Los Angeles; J. Schirber, Sandia National Laboratories; S. Minomura, University of Tokyo; R. Clarke, University of Michigan; B. Sundqvist, University of Umea, Sweden; and E. Iskevitch, Institute of High Pressure Physics, Moscow.

The program is being organized by co-chairmen F.P. Bundy and B.A. Lombos. Contributed papers should be submitted to:

F.P. Bundy
General Electric Research &
Development Center
P.O. Box 8
Schenectady, NY 12301

Fluids

The study of fluids under high pressure greatly helps a fundamental understanding of the behavior of matter, and of many technical processes in shock waves, thermonuclear fusion, geophysics and geochemistry, planetary and stellar science, and other fields. This study has made great progress in recent years in the magnitude of the pressure and temperature ranges, in the scope and accuracy of measurements, and in the theory.

The Fluids Under High Pressure symposium is intended to bring together workers in all these fields to exchange information and discuss common problems, and to illuminate all aspects of the behavior of fluids in science and technology using the techniques of high-pressure research.

Its scope will include molecular, ionic and metallic states at high pressures, and states at lower pressures if they

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AIRAPT

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include particularly illuminating aspects such as especially accurate or novel experiments or theories, states like mesophases that cannot be studied at higher pressures, and the like. Topics will include freezing and glass transitions, equilibrium properties, structural properties, physical and chemical relaxation processes, geophysical and geochemical applications, technological applications, etc.

The program is organized by co-chairmen E. Whalley and J. Jonas. Write to:

E. Whalley
Division of Chemistry
National Research Council
Ottawa, K1A 0R9
Canada

Engineering and Safety

The High Pressure Engineering and Safety symposium is the Third International High Pressure Engineering Conference, the successor

to meetings held in London in 1967 and Brighton in 1975. Unlike the other symposia of the present conference, which deal with the physics and chemistry of materials subjected to high pressures, this meeting will be concerned with the engineering aspects of generating, controlling, containing and using high pressures. For the purposes of this symposium, "high" pressure is considered as pressure exceeding about one kilobar (15,000 psi).

Sessions are planned in the general areas of:

Design, including closures, seals and the use of residual stresses.

Materials, including fatigue, fracture, environmental effects and superhard materials.

Applications, including hydrostatic extrusion and compaction and jet cutting.

Safety, including protection barricades, pressure release devices and non-destructive inspection.

The program, which will include both invited and contributed papers and utilize both lecture and poster

presentation formats, is being organized by a program committee co-chaired by D.J. Burns and D.P. Kendall. Write to: D.J. Burns

Department of Mechanical Engineering
University of Waterloo
Waterloo, Ontario
Canada

Fees

The registration fee will be US \$125, which will include the social program, banquet and published proceedings. There may be a small additional registration fee for companions to cover the cost of the social program. There may be available small grants toward the expenses of students whose expenses are not met from other funds. Applications for student grants should be sent to:

Clarke G. Homan
Physics Department
State University of New York
Albany, NY 12222

MRS AFFILIATES WITH A I P

The Materials Research Society has become an Affiliated Society of the American Institute of Physics. Formal affiliation was unanimously approved by the MRS Council in March.

The principal immediate benefit that will accrue to MRS members is that they will qualify to receive the journals of Member and Affiliated Societies of the AIP at member rates. Longer term, the Society intends to improve its internal operations and broaden the range of professional benefits it is able to offer its members through AIP affiliation. The most widely known of AIP's publications is *Physics Today*.

The American Institute of Physics was established as a non-profit organization in 1931 for the purpose of assisting societies with an interest in physics in promoting the advancement and diffusion of the science. In general it sought to leave to constituent societies the responsibility for holding scientific meetings and offered to

assume responsibility for the publication and distribution of their journals. That remains the AIP's principal function, although now it also provides support services.

Member Societies of the AIP include the American Physical Society, Optical Society of America, Acoustical Society of America, The Society of Rheology, American Association of Physics Teachers, American Crystallographic Association, American Association of Physicists in Medicine and American Vacuum Society. Affiliated Societies include the American Geophysical Union, American Institute of Aeronautics, American Society for Metals, Electron Microscopy Society of America, Geological Society of America, Instrument Society of America and the Society for Applied Spectroscopy.

Affiliation with AIP is without cost to the Society or its members.

BRIEFS

PROCEEDINGS VOLUMES, which have and continue to result from several of the Materials Research Society's topical symposia, as well as from MRS-sponsored topical conferences, have been registered as a series as an irregular serial publication. Each volume will, therefore, be assigned, in addition to its own international standard book number (ISBN), a common international standard serial number (ISSN). The change permits the various abstracting services to include the MRS series in their coverage.

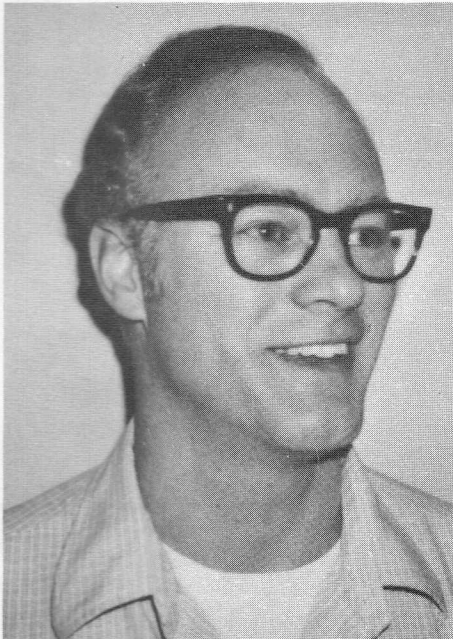
Authors citing work appearing in the series are advised the appropriate abbreviated form should read:

Mat. Res. Soc. Symp. Proc. Vol., Page (Year).

Source: MRS Publications Committee

HARRY C. GATOS, professor of electronic materials and molecular engineering, Massachusetts Institute of Technology - and a founder of Materials Research Society - has been elected a member of the National Academy of Engineering.

SPRING MEETING IN ALBUQUERQUE



NOBLE M. JOHNSON

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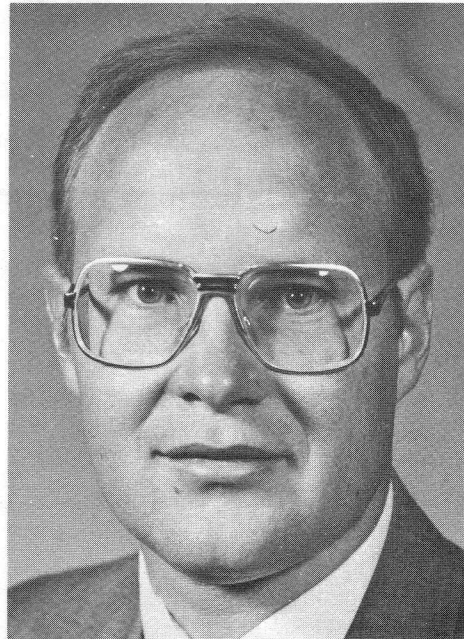
electrophoretic materials and ion jet technologies. The chairmen are Cecil Land of Sandia Labs and Derek Dove of IBM.

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



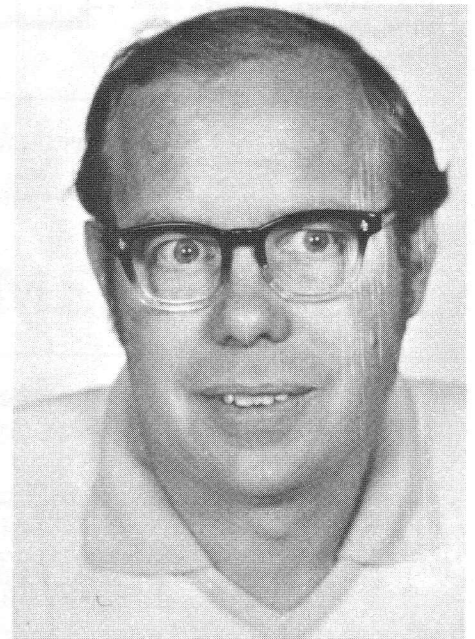
ROSS A. LEMONS

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

MRS BULLETIN

VOLUME VIII NUMBER 2

The Materials Research Society Bulletin is published bi-monthly by the Materials Research Society for its members and others interested in materials science. Correspondence and submissions are invited. They should be brief and typewritten (double-spaced), and the author's affiliation must be indicated. Address all material to the Editor.

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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.

Charimen 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*.