## Kaufmann to lead the Society in 1985

The Society's First Vice President and President Elect, Elton N. Kaufmann, will succeed C.W. "Woody" White as President on Jan. 1.

Kaufmann was born and raised in Cleveland, Ohio. He received a B.S. degree in physics, cum laude, from the Rensselaer Polytechnic Institute in 1964 and went on to graduate work at the

California Institute of Technology. There he pursued his doctoral research in low energy nuclear physics at Caltech's Norman Bridge Laboratory under the tutelage of Professor Felix Boehm. During his stay at Caltech, he was National both Science a Foundation Trainee and an Oak Ridge Associated Universities Fellow in Nuclear Science supported by the U.S. Atomic Energy Commission. His experimental research on internal hyperfine fields in ferromagnets and on nuclear magnetic moments led to a Ph.D. in physics awarded in 1969.



**ELTON KAUFMANN** 

In 1968, Kaufmann joined Bell Laboratories in Murray Hill, N.J.,

as a Member of Technical Staff in the Radiation Physics Research Department under the direction of Walter L. Brown, where he spent the next 13 years. While at Bell Labs, his research involved experimental work on nuclear moments, hyperfine magnetic and

electric quadrupole fields, ion-beam analysis, channeling and implantation, and laser surface melting of metals. In 1981, Kaufmann assumed his present position in the Chemistry and Materials Science Department of the Lawrence Livermore National Laboratory in Livermore, Calif. There he serves in three capacities: Principal Investigator for both the Chemistry Research Resource and the DOE Office of Basic Energy Sciences programs in Directed Energy Surface Processing; Research Program Leader for Advanced Nonequilibrium Materials Processing, and Team Leader of Device Fabrication for Nuclear Design. He has published more than 85 technical articles, co-edited two books and serves as co-principal editor of the international journal, Hyperfine Interactions. He has also been an Associate of the Graduate Faculty of the University of Guelph and a Visiting Researcher at the University of Bonn. Besides the MRS, he is a member of the American Physical Society and The Metallurgical Society of AIME.

In 1980, with G.K. Shenoy of the Argonne National Laboratory, Kaufmann chaired the Symposium on Nuclear and Electron Resonance Spectroscopies Applied to Materials Science at the Annual Meeting of the MRS. He then organized and chaired, with L.A. Boatner of ORNL and L.L. Chang of IBM, the 1982 Annual Meeting. Since that time he has served as a member of several MRS committees, chairing the Corporate Participation Committee and heading the MRS Headquarters Implementation Task Force. He was elected as Second Vice President for 1983 and as First Vice President for 1984. The MRS Constitution provides that the First Vice President shall succeed the sitting President at the end of the calendar-year term.

## A preview of the Society's future

Our Society has experienced phenomenal growth over the past year. The list of new activities is long. The first annual Spring Meeting occurred most successfully in Albuquerque last February. Our new headquarters operation has been up and running for more than one year under the expert direction of our Executive Director, John Ballance, and the first stage of automating our headquarters procedures is complete as we anticipate further expansion to handle our growth. This meeting in Boston boasts a short-course program tripled in size over last year and is inaugurating the Job Placement Service and the Equipment Exhibit.

Also, the proceedings of symposia at this meeting will, for the first time, be published by the Society itself, with books being offered to attendees and the public at much reduced prices. To support our publication operation, we have established a new position, Director of Publications, at the headquarters office and are most pleased to have Gail A. Oare join our staff in that capacity.

### A Year of Great Activity

In parallel with the increase in activity, we have seen an increase in membership and meeting attendance and a more than 50% expansion in our Corporate Affiliates program. Finally, we have seen this year the establishment of the first local Chapter of the MRS in North Carolina.

In addition to this flurry of new activity on the domestic scene, we are seeing the realization of an international MRS. Our colleagues in Europe have now produced two highly successful meetings and are in the midst of planning expanded programs for the future. You will see in coming issues of the BULLETIN much more about the activities of MRS-Europe.

Clearly the rapid expansion of MRS activities and the Society's overall excellent health would not have been possible without the dedicated service of its many volunteers. The Council and the committees have done an outstanding job. The officers of the MRS cannot adequately be thanked for their expert and unflagging contributions. Our retiring Secretary, Dick Schwoebel, and retiring Treasurer, Kathy Taylor, have been largely responsible for the administrative and fiscal soundness we have today. Retiring Second Vice President Bill Appleton has added immeasurably to the quality of our programing, publication, and education activities. Behind all of us, pushing, and in front, leading the way, has been our dynamo, Woody White. As Second and First Vice President and as this year's President he has worked harder and more creatively than all of us combined. Now he is certainly entitled to a well-deserved rest but, knowing Woody, he will undoubtedly continue to actively shape the Society's future as Past President next year and beyond.

### A Year of Continuing Growth

What's ahead? It is unlikely that we will see an increase in the number of new activities by the same amazing factor as [Continued on Page 26]

# Spring in San Francisco

### The second spring conference expands in scope

The scope of the Society's Spring Meeting series continues to expand, as graduate student awards are added to the list of offerings comprising the second such meeting, to be held April 15-18 in San Francisco.

"We felt it important to recognize some of the excellent work being done by graduate students, and to encourage their professional participation," says Susan M. Kelso, Xerox Palo Alto, Calif., Research Center, a co-chairperson of the meeting. The others are A. Wayne Johnson, Sandia National Laboratories, and K.S. SreeHarsha, San Jose, Calif., State University.

The awards are similar to those given at the Annual Meeting each fall. Application forms are available from the Society's headquarters, 9800 McKnight Road, Suite 327, Pittsburgh, Pa. 15237.

### The Advantage of Small Meetings

"The spring meetings were begun because the Annual Meeting had become too big," Susan notes. "And already the spring meeting is growing rapidly: the first one this year had four symposia while we will have nine next April in San Francisco. Our aim is to serve the growing needs of the materials research community while keeping the give-and-take atmosphere usually associated with smaller meetings."

Several of the symposia have an emphasis associated with the western U.S. location. Some topics are of especially high interest in the Bay Area and Silicon Valley. A number of invited speakers will travel from Japan and Australia. "But we expect that all symposia will have widespread interest and participation," Susan says.

About half of the topical symposia have some roots in symposia previously held at MRS meetings, including the inaugural Spring Meeting this year in Albuquerque. The other topics are new. All of the symposia will provide a timely interchange of information on problems of interest in materials research, and reflect the participation of a 15-member local program advisory group, which consulted with the meeting chairs.

#### Another Addition: Symposium X

In addition to the eight topical symposia, Rustum Roy will organize Symposium X-a symposium crossing all symposia-for the San Francisco meeting. "This lunchtime series of tutorials has been a great success in Boston and we are pleased to be able to continue the tradition in the Spring Meeting," Susan says.

The symposia and their chairmen are:

A. Ion Beam Processes in Advanced Electronic Materials and Device Technology; F.H. Eisen, Rockwell; B.R. Appleton, Oak Ridge, and T. Sigmon, Stanford.

**B.** Microscopic Identification of Electronic Defects in Semiconductors; N.M. Johnson, Xerox PARC; S.G. Bishop, NRL, and G.D. Watkins, Lehigh University.

C. Thin Films: The Relationship of Structure to Properties; K.S. SreeHarsha, San Jose State University, and C.R. Aita, University of Wisconsin/Milwaukee.

**D. Mass Memory Technologies;** M.A. Bosch, AT&T Bell Laboratories, Holmdel, and Balzers AG; D. Davies, 3M, and I. Croll, IBM San Jose.

E. Applied Materials Characterization; W. Katz, General Electric, and P. Williams, Arizona State University.

F. Materials Issues in Applications of Amorphous Silicon Technology; A. Madan, SERI; M.J. Thompson, Xerox PARC, and D. Adler, MIT.

G. XUV and X-ray Optics for Synchrotron Radiation; P.A. Pianetta, SLAC, Stanford, and J. Golovchenko, AT&T Bell Laboratories, Murray Hill.

H. High-Power Dielectric Optical Mirrors; K.C. Jungling, J.K. McIver, and J.R. McNeil, all of the University of New Mexico.

X. Frontiers of Materials Research; R. Roy, The Pennsylvania State University.

### MRS and NATO set meeting on lasers

The Materials Research Society is cosponsoring a NATO advanced study institute on "Laser Surface Treatment of Metals," to be held in San Miniato, Italy, Sept. 2-13, 1985. The ASI will serve as a forum for discussion of topics ranging from the latest in research trends to present-day commercial utilization of lasers in the surface treatment of metals.

The ASI will be formatted around six topical areas. These will be treated with a mix of tutorial overview, specialty reports, discussion sessions, and poster papers. All presentations will be in English. A NATO series book will be published and papers will be due at the time of the meeting.

An advanced study institute is a highlevel teaching activity at which a carefully defined subject is presented in a systematic and coherently structured program. The subject is treated in considerable depth of lecturers eminent in their field. An ASI has a relatively small number of participants, approximately 75, facilitating formal and informal discussion on the various aspects of the presentation.

A number of lecturers are active members of the MRS, including Professor Spaepen, Harvard, Professor Bergmann, Clausthal, Dr. Peercy, Sandia, and the President of the MRS in 1985, Dr. Elton N. Kaufmann, Lawrence Livermore.

The number of participants and students attending will be limited. For consideration, applications should be received as soon as possible, and no later than April. Limited funds are available for assisting expenses. Applications may be requested from either of the meeting's directors:

> C.W. Draper AT&T Technologies Engineering Research Center P.O. Box 900 Princeton, NJ 08540 U.S.A.

P. Mazzoldi Dipartimento Di Fisica Universita di Padova 35131 Padova Via F. Marzolo, 8 Italy