

## Gibala Leads Executive Committee in 1999



Ronald Gibala



Harry A. Atwater



Chuang Chuang Tsai



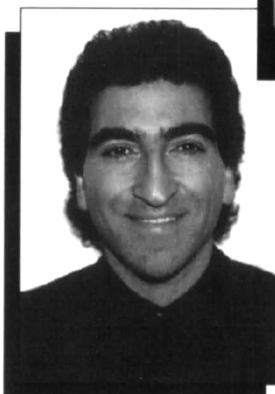
Merrilea J. Mayo



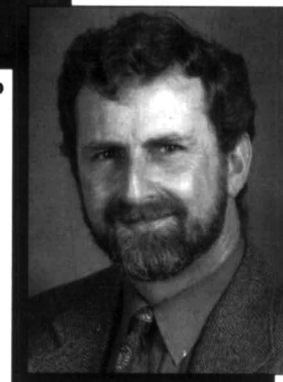
Alan J. Hurd



Robert J. Nemanich



Michael J. Aziz



Alex King

**Ronald Gibala** (University of Michigan) automatically assumes the presidency of the Materials Research Society for 1999, after serving as Vice President (President-Elect) in 1998. He succeeds **Robert J. Nemanich** from North Carolina State University, who now serves MRS as Immediate Past President.

**Harry A. Atwater** (California Institute of Technology) has been elected Vice President (President-Elect). **Chuang Chuang Tsai** (Applied Komatsu Technology) remains Secretary, serving the second of her two-year term, and **Merrilea J. Mayo** (Pennsylvania State University) has been elected for a two-year term as Treasurer. Mayo is currently serving as the 1998–1999 Optical Society of America/Materials Research Society Congressional Science and Engineering Fellow, and will step into her role as Treasurer on September 1, 1999, when her Fellow tenure is completed. In the interim, **Alan J. Hurd** (Sandia National Laboratories) has been appointed by the MRS Council to serve as Treasurer through August 31, 1999. The Council has elected two Councillors to serve one-year terms on the Executive Committee: **Michael J. Aziz** (Harvard University) and **Alex King** (State University of New York

at Stony Brook).

The newly elected MRS Councillors are **John W. Cahn**, National Institute of Standards and Technology; **Anthony K. Cheetham**, University of California—Santa Barbara; **A. Lindsay Greer**, Cambridge University; **Stephen J. Pennycook**, Oak Ridge National Laboratory; **Caroline A. Ross**, Massachusetts Institute of Technology; and **Rudolf M. Tromp**, IBM T.J. Watson Research Center. They will serve three-year terms beginning January 1, 1999, and join the following current members of Council: **Michael J. Aziz**; **Katayun (Katy) Barmak**, Lehigh University; **Theodore M. Besmann**, Oak Ridge National Laboratory; **David J. Eaglesham**, Bell Laboratories, Lucent Technologies; **Alex King**; **Karen Maex**, IMEC, Belgium; **Amy J. Moll**, Hewlett Packard; **Tim Sands**, University of California—Berkeley; and **Alan I. Taub**, Ford Motor Company.

**Ronald Gibala**  
*President*

Ronald Gibala is a professor in and former chair of the Department of Materials Science and Engineering at the University of Michigan. He directs the Center for High Temperature Structural

Metallic Materials, an interdisciplinary program funded by the Air Force Office of Scientific Research. His current research interests are in the area of mechanical behavior of materials, particularly intermetallic alloys and related quasi-brittle materials.

After receiving his PhD degree in 1964 in metallurgical engineering from the University of Illinois at Urbana-Champaign, Gibala taught at Case Western Reserve University from 1964 to 1984 and was associate director and director of the CWRU Materials Research Laboratory during the latter part of that time. He joined the University of Michigan in 1984.

Gibala has served on numerous advisory committees and participated in various professional societies. He served as Councillor on the MRS Executive Committee in 1996 and 1997, and he was elected Vice President (President-Elect) for 1998. He has also served as MRS symposium organizer and meeting chair.

**Harry A. Atwater**  
*Vice President*  
*(President-Elect)*

Harry A. Atwater is associate professor of applied physics at the California

Institute of Technology. He focuses his research on the synthesis and characterization of new thin-film electronic and photonic materials, and the development of new analytic and processing methods for electronic materials.

Prior to joining Caltech as assistant professor in 1988, Atwater received a PhD degree in electrical engineering from the Massachusetts Institute of Technology in 1987. He was an IBM Postdoctoral Fellow in applied physics at Harvard University (1987–1988), and he received an NSF Presidential Young Investigator Award in 1989. For 15 years, Atwater has been an active contributor to Spring and Fall MRS Meetings. He received an MRS Graduate Student Award in 1985, co-organized four MRS technical symposia, co-chaired the 1997 MRS Fall Meeting, and has served as chair of the MRS Graduate Student Awards Subcommittee and as MRS Councillor.

#### **Chuang Chuang Tsai** *Secretary*

Chuang Chuang Tsai is Director of Technology and Marketing at Applied Komatsu Technology (Santa Clara), an equipment manufacturer for the flat-panel display industry. Prior to joining AKT in 1997, she was a technical program manager at dpiX, a spin-off from Xerox Palo Alto Research Center, developing flat-panel display and medical-imaging technology, and, from 1978 to 1996, she worked at Xerox—PARC. Her current research focus is on active-matrix liquid-crystal display and medical-imaging technology.

Tsai received her PhD degree from the University of Chicago in 1978. She was a recipient of the Xerox Corporate Research Group (CRG) Excellence in Science and Technology Award in 1989 and 1993. She is co-holder of U.S. patents, a co-author of over 100 scientific papers, and co-editor of six symposium proceedings on the topics of microcrystalline and nanocrystalline semiconductors, and integrated-circuit and solid-state technology.

Tsai has co-organized three MRS symposia, and has served on the Meetings Quality Subcommittee, the Program Development Subcommittee, the Program Committee, and the editorial board of *MRS Bulletin*. She co-chaired the 1996 MRS Spring Meeting.

#### **Merrilea J. Mayo** *Treasurer*

Merrilea J. Mayo is an associate professor of materials science and engineering at the Pennsylvania State University. Her research interests are in the areas of processing and properties of nanocrystalline ceramics and of superplasticity. She

received her PhD degree in materials science and engineering from Stanford University in 1988.

Mayo has received a Fellowship from the Japan Society for the Promotion of Science (1993) and from the Exxon Foundation (1982–1984) and the NSF Presidential Young Investigator Award (1991–1996). She has served on the National Research Council's Advisory Panel on the National Institute of Standards and Technology (NIST) and on the Advisory Committee on Army After Next (AAN) Logistics. She has over 50 authored and co-authored publications.

Within MRS, Mayo has served on the External Affairs and Public Affairs Committees since 1994 and has previously served on the Graduate Student Award Subcommittee, Program Planning Committee, Long-Range Planning Committee; on Council; and as chair and symposium organizer. She was also part of the MRS Headquarters Building Task Force and was actively involved in developing MRS's materials-related interactive displays.

#### **Alan J. Hurd** *Interim Treasurer*

Alan J. Hurd is manager of the New Materials Theory and Validation Department at Sandia National Laboratories and adjunct professor of physics at the University of New Mexico. His research interests center around complex fluids, including colloidal physics, sol-gel film technology, and the physics of dip-coating.

Prior to joining Sandia in 1984, Hurd taught physics at Brandeis University. He has served on advisory groups for Los Alamos National Laboratory, the National Research Council, the National Renewable Energy Laboratory, and the University of New Mexico. He has been awarded three research awards by the Department of Energy. Hurd's PhD degree from the University of Colorado (1981) is in physics.

Hurd's contributions to MRS include Treasurer (1996–1998), participation on the Long-Range Planning Committee, the Academic Affairs Committee, the Membership Committee, and the former *MRS Bulletin* Subcommittee; symposia organizer; short course instructor; and chair of the 1994 Spring Meeting.

#### **Robert J. Nemanich** *Immediate Past President*

Robert J. Nemanich, professor of physics and an associate member of the Department of Materials Science and Engineering at North Carolina State University, coordinates an interdisciplinary research program involving postdoctoral research associates and undergraduate and graduate

students from various departments. His main research interest area is in electronic materials.

After receiving his PhD degree in physics from the University of Chicago in 1976, Nemanich worked at Xerox Palo Alto Research Center from 1976 to 1986. He was involved with research, development, and research management in the Integrated Circuit and General Science Laboratories.

Within MRS, Nemanich served as President (1998), Vice President (President-Elect) (1997), Second Vice President (1996), and, prior to that, as chair of the Continuing Education Committee for three years. He has served on the Publications and Program Committees, co-organized five MRS symposia, and co-chaired the 1989 MRS Fall Meeting.

#### **Michael J. Aziz** *Councillor*

Michael J. Aziz, Gordon McKay Professor of Materials Science at Harvard University, focuses his research on the experimental and theoretical development of the understanding of the physical underpinnings of materials processing. His current interests are in the effects of stress on atomic transport kinetics; the phenomenological and the mechanistic modeling of the kinetics of diffusion, solidification, and thin-film growth; and experimental tests of such models. Aziz received his PhD degree in applied physics from Harvard in 1983. He spent two years at Oak Ridge National Laboratory as a Eugene P. Wigner Postdoctoral Fellow before joining the faculty at Harvard. Among his awards are the IBM Faculty Development Award, the Presidential Young Investigator Award, and the ONR Young Investigator Award, and he is a Fellow of the American Physical Society.

Aziz received an MRS Graduate Student Award and has served MRS as symposium organizer, co-chair of the 1995 Fall Meeting, principal editor of the *Journal of Materials Research*, and on several committees including the Awards Committee and the Program Committee. He served on the MRS Council since 1998.


#### **Alex King** *Councillor*

Alex King is a professor in the Department of Materials Science and Engineering at the State University of New York at Stony Brook where he has served as vice provost for graduate studies. His research program focuses on interfacial structure and behavior, with extended interests in other areas including thin films, semiconductors, polymers, and materials process-

ing. King received his doctorate degree, in 1979, from Oxford University. Following a brief period as a research fellow at Oxford, King joined the Massachusetts Institute of Technology as a postdoctorate. He joined

the SUNY faculty in 1981.

At MRS, King has served on the Program Committee and its Meetings Quality Subcommittee. He was a symposium organizer at the MRS 1993 Fall Meeting and

co-chair of the MRS 1997 Spring Meeting where he implemented the Meeting Chairs' Poster Prize. He has served on the MRS Council since 1998. 

## MRS Bulletin Volume Organizers Guide Technical Theme Topics for 1999



Marie-Isabelle Baraton



Robert C. Cammarata



Steve M. Yalisove

The *MRS Bulletin* Volume Organizers for 1999 are Marie-Isabelle Baraton (University of Limoges), Robert C. Cammarata (Johns Hopkins University), and Steve M. Yalisove (University of Michigan). They have selected an eclectic set of themes for the 1999 volume of *MRS Bulletin*, representing the efforts of a distinguished and international group of guest editors and authors. The volume will start and end with issues devoted to materials characterization. The first installment will discuss synchrotron radiation techniques for *in situ* characterization during materials processing, and the final installment will be devoted to neutron scattering methods. The general area of materials chemistry will be covered in five issues involving the topics of membranes and membrane processing, corrosion science, chemical gas sensors, computer simulations of materials development and processing from thermochemical data, and the crystal chemistry of partially disordered materials. Materials science at the nanometer-length scale will be explored in three issues involving the themes of novel methods of nanoscale wire formation, the mechanical behavior of nanostructured materials, and the materials science of the cell. Issues covering rare-earth materials and advanced materials for energy storage will round out the rest of the volume. For a list of topics and guest editors for 1999, access the *MRS Bulletin* website at [www.mrs.org/](http://www.mrs.org/).

Marie-Isabelle Baraton is a senior scien-

tist in the Department of Ceramics (LMCTS, UMR CNRS) at the University of Limoges, France. She received a Doctorate in Science from the University of Limoges in 1979. In 1986 and 1987, she obtained a NATO grant to conduct research on infrared surface characterization of ultrafine powders and on Langmuir-Blodgett films in the Department of Chemistry at the University of Ottawa, and in the Lash Miller Laboratories at the University of Toronto, Canada. Baraton's current research interests include the physical-chemistry of nanomaterial surfaces (metal oxides, and non-oxide ceramics such as SiC, AlN, GaN, Si<sub>3</sub>N<sub>4</sub>...), as well as theoretical (*ab initio* calculations) and experimental studies of chemical reactions at gas-nanomaterials interfaces. Her research work finds applications in the dispersion of nanoparticles in polymeric matrices, semiconductor passivation and surface functionalization, gas sensing, self-assembled layers, and coatings. Baraton has co-authored over 100 papers, communications and book chapters, including review articles on FTIR surface characterization of nanoparticles. Baraton is currently the leader of a European consortium comprising industries and universities funded by the European Commission, working on novel gas sensors based on nanomaterials for air quality monitoring. She is a member of the American Chemical Society and the European Materials Research Society. Along with serving as a volume organizer

for *MRS Bulletin*, Baraton has organized a symposium on nanomaterials in 1997 for MRS.

Robert C. Cammarata is a professor in the Materials Science and Engineering Department at Johns Hopkins University, which he joined in 1987. He is also adjunct professor at the University of Maryland—College Park. Prior to that, he was an IBM Postdoctoral Fellow at the Massachusetts Institute of Technology from 1985 to 1987 where he worked on metal silicide formation in ion implanted thin films. Cammarata's research interests include the mechanical behavior of multilayered and nanostructures thin films and the effects of surface and interface stresses on the structure and properties of thin films and surfaces. He received his SB degree in materials science and engineering from MIT in 1979 and his PhD degree in applied physics from Harvard University in 1985. He is a Past-President of Alpha Sigma Mu (national materials honor society). Along with serving MRS as a volume organizer for *MRS Bulletin*, Cammarata has co-organized several MRS symposia.

Steve M. Yalisove is an associate professor at the University of Michigan in the Materials Science and Engineering Department. Studying mathematics at the University of Rochester, Yalisove received a Masters degree in mechanical and aerospace studies in 1979, then joined General Electric Re-Entry and Environmental Systems Division in the aerothermodynamics division. In 1986 he received a PhD degree in materials science and engineering from the University of Pennsylvania and held a postdoctorate position at AT&T Bell Laboratories. He left Bell Labs in 1989 to join the faculty at Michigan. Yalisove has studied low temperature growth of many materials including homoepitaxy of Si, epitaxy of silicides on patterned substrates, and the evolution of thin film microstructure of metallic films using surface techniques, tunneling electron microscopy, and *in situ* x-ray scattering. He recently completed a Fulbright Fellowship in The Netherlands. Along with serving as a volume organizer for *MRS Bulletin*, Yalisove has served on several MRS task forces and committees, and has co-organized several MRS symposia. 