As the Presidents See It...

MRS Grows with its Members

Kathleen C. Taylor, 1987 MRS President

While 1987 was the year of my MRS presidency, my tenure on various committees and in other elected positions with the Materials Research Society spans more than 16 years, dating back to my first MRS meeting in 1976. Following that, I went on to be a symposium organizer and meeting chair, then held every elected office except secretary before assuming the presidency. Over the course of those 11 years, I experienced the transformation of the Materials Research Society from a small annual "meeting in Boston" to a well-respected technical society. Everything we did during that period was always the first or the largest ever for MRS—the largest meeting to date, the largest equipment show, the first short-course program, the first MRS Spring Meeting.... The rapid growth in the size of our meetings (including the nuclear waste "mega" symposia), the popularity of the MRS Proceedings volumes, and the tireless assistance of Ernie Hawk at the Penn State Materials Research Lab gave MRS the strength to hire a full-time executive director (John Ballance) and secretary (Anne Wagner). Support from the funding agencies and corporate sponsors contributed to the high quality of meeting symposia.

My strongest memory as MRS President is the tremendous dedication and effort of MRS volunteers—the community of researchers who worked for MRS. Running MRS is a team effort. My team was made up of Gordon Pike, Past President; John Baglin, First Vice President; Bob Chang, Second Vice President; Julia Phillips, Secretary; and Sue Kelso, Treasurer. Our mode of operation was a monthly conference call with MRS Executive Director John Ballance. These calls were our mechanism for executing the operational aspects of the Society. Close communication among the officers and staff allowed us to make quick decisions, as needed, during this period of tremendous growth.

The major events for MRS, then as now, were the annual MRS Spring and Fall Meetings. Our 1987 Spring Meeting was held in Anaheim, organized by Meeting Chairs Russ Chianelli, Graham Hubler, and Greg Olson. The 1987 Fall MRS Meeting was organized by Tom Picraux, Barry Scheetz, and Murray Gibson. All details of on-site meeting arrangements were handled by The Complete Conference under the direction of Marilyn Hauck and Merry Geil. (Merry has since joined the staff of MRS.) Our equipment exhibit was put on by the American Institute of Physics under the direction of Ed Greeley and Bob Finnegan. The MRS Short Course Program was organized by Vivienne Harwood Mattox under the oversight of Short Course Committee Co-Chair Al Romig. Our philosophy was that the nontechnical meeting operations should be run by experienced professionals.

Dave Campbell co-chaired the MRS Publications Committee. During 1987 the *MRS Bulletin* grew from six to eight issues per year under the continuing direction of MRS Bulletin Chair Elton Kaufmann. Frank Gambino, MRS Journals Chair and Editor-in-Chief Walter Brown saw *JMR* through its second year of publication. Twenty-five books were scheduled for publication under the direction of MRS Proceedings Chair Peter Pronko and MRS Publications Director Gail Oare.

1987 was also the year that high-temperature superconductivity took off, drawing large crowds at MRS meetings and significant press coverage—a busy time for Public Relations and Publicity Committee Chair Carol Jantzen. The MRS Graduate Student Awards continued to be eagerly sought. The Student Mixer at MRS Meetings was started in 1987 under Education Committee/University Relations co-chair Gary Tibbetts. 1987 also saw the initiation of the MRS Symposium Development Subcommittee of the Program Committee under the direction of Jim Roberto. This subcommittee examined the need for both balance and continuity in symposium programming. Other MRS committee co-chairs were Clif Draper—Finance, Rod Quinn—Program, Julia Phillips—Membership, Elton Kaufmann—External Affairs, Michael Quick—Corporate Participation, and Gordon Pike—Awards, Long Range Planning, and Nominating.

The 1987 MRS Spring Meeting included 13 topical symposia and was attended by more than 1,500 scientists from around the world. The symposium on high-temperature superconductors, organized by Mike Schluter and Don Gubser, was videotaped and offered for sale after the meeting. The Plenary Address by NASA astronaut Bonnie Dunbar provided an inside look at her work as a mission specialist.

The 1987 MRS Fall Meeting broke another attendance record with more than 3,500 participants. Twenty-nine short courses were offered at the meeting. The symposium on Biomedical Materials and Devices organized by J.S. Hanker and B.L. Giammara was highlighted by the Plenary Address by William C. DeVries on "Medical and Materials Issues of the Total Artificial Heart." A special symposium on "Education in Materials Science and Engineering: The Changing Role of University, Industry, and Government Interactions" featured an address by National Science Foundation director, Erich Bloch. The 1987 Von Hippel Award was presented to Sir Charles Frank for his wide-ranging impact on modern materials science.

During 1987, MRS membership rose to 5,900. I attribute that growth and success to the dedication and efforts of MRS volunteers. MRS, a society run *by* researchers *for* researchers, is responsive to the needs and interests of its members. MRS symposia are what people are working on. That is, after all, what a technical society is about—a forum for the exchange of scientific information.

Kathy Taylor *is department head of the Physical Chemistry Department at General Motors NAO Research and Development Center.*

Answering the Call of MRS

Gordon E. Pike, 1986 MRS President

It was a quiet fall day in 1980 at Sandia. I was absorbed in a technical problem when the phone call came—a call that would make a profound and encompassing change in my life. The caller was Harry Leamy, whom I did not know, and he was calling as a meeting chair for the Materials Research Society, of which I had never heard. He described an "alien" idea: that there was great benefit to be gained in

holding a technical symposium in which physicists, chemists, ceramists, electrical engineers, and even materials scientists could participate *together* in a topical meeting concerning grain boundaries in semiconductors. Worse yet, he asked me to help *organize* such a disparate group. After some thought, and with considerable skepticism, I finally agreed to be a coorganizer. The rest is history, but a history rich in bright, inspiring people and exciting, fulfilling developments.

In 1981, my first full year of involvement, the Society was little more than a meeting—nearly all of the 900 MRS members were attendees from the previous Fall Meeting. There was a newsletterlike *Bulletin*, the Von Hippel Award, and Graduate Student Awards, but the entire operation was run on a budget of only $50,000; there was no headquarters, proceedings were published by a commercial publisher, and there was little interaction with other professional societies or governmental policy organizations.

By the time I became president in 1986, the membership had increased by a factor of four, and would increase again that year by 35%. The budget, which had approximately doubled each previous year to accommodate the increased activities and improved services, stood at $1.6 million. By 1986, the Society had already established a small headquarters office of five full-time staff, but they were struggling with the greatly increased demands of growing membership, expanded technical programs, and new initiatives.

Since technical meetings have always been the primary focus of MRS, and since the logistics associated with their increasing size and complexity were growing faster at that time than the volunteer meeting and symposium chairs could handle, one of my main goals as president was to create a professional infrastructure at headquarters to support the nontechnical aspects of the meetings. A director of finance and several staff were hired to concentrate on the business aspects of the meetings and other Society activities, and to allow our executive director, John Ballance, more time to devote to the meetings. Since then, the responsibilities assumed by headquarters personnel have increased steadily. A major effort was also made to guarantee adequate meeting space for future meetings. The Executive Committee had decided that the Fall Meeting would probably stay in Boston, but they were still interested in experimenting with West Coast facilities for the Spring Meetings. Space was booked by contract through 1990, and by options through the mid-90s for meetings on an expanded level. The interest in having fully interdisciplinary meetings on specific topics was increasing in popularity and accounted for a large part of MRS growth. In 1986 there were two new areas of highly increased interest. The Spring Meeting featured the first symposium on Heteroepitaxy on Silicon Technology, which attracted a great deal of interest not only from those who were able to demonstrate successful techniques, but also from those in the microelectronics industry who wanted this technology. The biggest technical surprise, however, came at the Fall Meeting, when Professor K. Kitazawa announced in a late-news paper that the record for superconductor transition temperatures had been raised dramatically, from 23 K to nearly 35 K, and that this increase had been found in a ceramic material. This announcement started a quest that is still continuing, with materials just now beginning to find commercial applications.

In addition to the expanding technical programs, the Society's publications were also changing rapidly. With the help of many people, but particularly Charles Duke and his staff at Xerox, the first issue of the *Journal of Materials Research* appeared in March 1986. This was a healthy issue, with 28 articles in 229 pages, and it contained not only the standard table of contents, but also an innovative "Contents by Topic," so researchers not familiar with words in a paper title would still be able to scan the papers for topics in unfamiliar areas relevant to their interests. Throughout that year, many volunteers expended a lot of effort soliciting high-quality manuscripts for this fledgling journal, and developing a subscription base for it among technical libraries. This work was directed by David Campbell, chair of the Publications Committee, and it was largely successful—in both a technical and a business sense—in converting the careful planning of 1985 into an actual journal. As editor-in-chief of *JMR*, Charles Duke demonstrated his outstanding ability to establish an editorial office and policies, collect manuscripts and arrange for their timely review, and actually publish a new journal. With the satisfaction that comes from such achievement, Charles resigned after the first year of publication so he could attend to other things. By the end of 1986, MRS had moved the *JMR* editorial office to Pittsburgh headquarters, hired Linda Krysinski as the editorial assistant, and appointed Walter Brown as the new editor-in-chief, to begin in 1987.

In 1986, the *MRS Bulletin* was significantly transformed by the appointment of Elton Kaufmann as chairman of the editorial boards and de facto technical editor. Elton—for the first time—published *Bulletins* with technical themes in addition to the Society news. The new format, with high quality articles, was instantly welcomed, and that basic structure can still be seen in today's *Bulletins*. Changes were also occurring in the publication of books. Under the leadership of Gail Oare, director of publications, MRS had already begun publishing its own proceedings. But in 1986 the Society published the first proceedings of a conference not sponsored by MRS; today, selected non-MRS proceedings are still published, following this example.

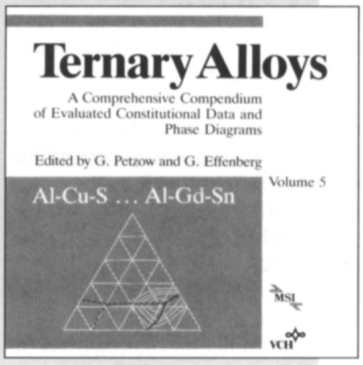
The materials science and engineering (MS&E) study by the National Research Council, just getting underway in 1986, offered MRS its first opportunity to work with the broader materials community for a common, unifying purpose. In response to a request for professional society involvement from the study chairs, Praveen Chaudhari and Merton Flemings, the Society embarked on two projects to provide input. Papers were solicited across the board to identify issues associated with each of the study's five major areas. These were published as a booklet, titled *Communications on the Materials Science and Engineering Study*, and submitted to the study chairs as official input from MRS; this booklet, incidentally, was the first response from any professional society. MRS also held a forum on the MS&E study at its Fall Meeting that year. At this forum, representatives from each panel described their progress to date, and attendees had an opportunity to air their suggestions in an open session.

In this environment, with established activities growing rapidly and many new activities being initiated, situations with no precedent frequently occurred. Without established policies or procedures, the resulting questions and decisions quickly reached my desk, often by telephone. One afternoon in March, I returned to my office after a two-hour meeting. Taped to my door was a message from my secretary, Mary Russo, without whom I would not be sane today. Although simple, it aptly described the daily routine: "Call everybody you know or *may* know."

***Gordon Pike** is department manager of Materials and Process Sciences Operations at Sandia National Laboratories.* □

https://doi.org/10.1557/S0883769400037386 Published online by Cambridge University Press

Reference Series from VCH



"All ternary alloys which have ever enjoyed the attention of experimentalists."

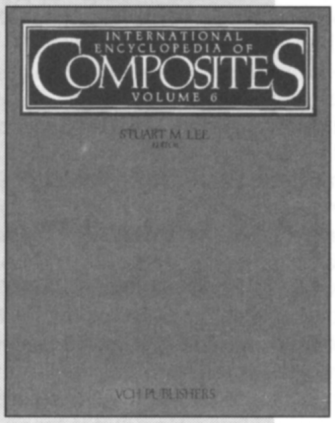
The development and optimization of metallic materials depends substantially on the information found in phase diagrams. *Ternary Alloys* is a new series providing, in over 40 volumes, all known phase diagrams of three-component systems in a concise and easy-to-read form.

Under the editorship of G. Effenberg and G. Petzow, from the MPI for Metals Research, Stuttgart, the data have been critically evaluated and updated by an international team of experienced materials scientists.

The ternary system reports are placed in alphabetical order according to the constituent elements.

Volumes 1 and 2 (1236 pages) deal with 446Ag-X-Y alloys, while Volumes 3-8 describe more than 800 ternary aluminium systems on approximately 3300 pages.

Ternary Alloys can be purchased by volume, by category (e.g., silver systems, aluminium systems), or as a complete set.

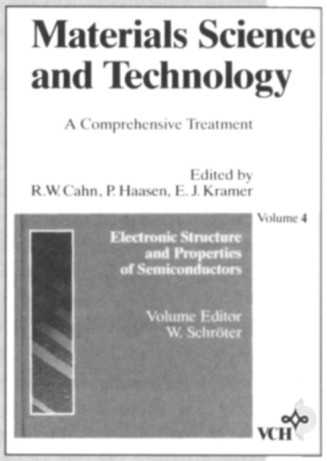


"A standard reference for the exciting new field of composites."

Coverage from A to Z of all aspects of composites and related process technology is now available for the first time in the six-volume *International Encyclopedia of Composites*.

240 original articles, each containing 15-20 illustrations and an extensive bibliography, provide a thorough understanding of the analysis, formulation, design, evaluation, processing, manufacture, testing and reliability of composites. Special attention is given to current developments in emerging and rapidly changing areas of this new technology.

Edited by Stuart M. Lee, the *International Encyclopedia of Composites* is the joint product of over 300 experts in industry, academia and government worldwide.



"Sure to establish itself as a seminal work."

The 18 volume series *Materials Science and Technology* is an in-depth, topic-oriented reference work consisting of self-contained handbooks.

The series covers the most important classes of materials: metals, ceramics, glasses, polymers, semiconductors, and composites.

Each volume has its own expert editor and deals with properties, processing, applications, or general phenomena associated with a particular type of material.

Edited by R.W. Cahn, P. Haasen, and E.J. Kramer, the series *Materials Science and Technology* can be used both as a reference work and for teaching purposes. Each volume contains 10-20 contributions on an average of 550 pages. The series can be purchased as a set or by individual volume.

ORDER FORM

Please send me a comprehensive prospectus on the series

- ☐ **Ternary Alloys**
- ☐ **Encyclopedia of Composites**
- ☐ **Materials Science and Technology**

Circle No. 21 on Reader Service Card.

Name.....

.....

Address.....

.....

.....

.....

.....

.....

VCH, Attn. Sabine Bischoff
P. O. Box 10 11 61, D-6940 Weinheim
(FRG and all other countries)
Fax: +49-6201-606328

VCH, Hardstrasse 10
CH-4020 Basel (Switzerland)
Fax: +41-61-2710618

VCH, 220 East 23rd Street, New York,
NY 10010-4606 (USA and Canada)
Fax: +1-212-481-0897

VCH, 8 Wellington Court
Cambridge CB1 1HZ (UK)
Fax: +44-223-313321

VCH