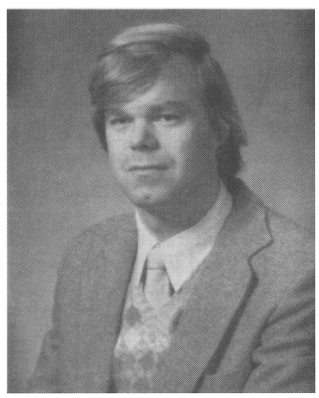
ROSTER OF AFFILIATES GROWS

A Dozen Concerns Are Added As MRS Corporate Affiliates, Making The Current List The Largest In The Society's History

Another dozen institutions have joined with the Materials Research Society in accelerating the pace of materials research and development and improving their quality as MRS Corporate Affiliates. The new Affiliates are Applied Materials; ARCO/Solar, Inc.; C-E Power Systems; Drytek, Inc.; Energy Conversion Devices, Inc.; GCA Corporation; Instruments SA, Inc.; LFE Corporation; Los Alamos National Laboratory; Materials Research Corporation; Plasma-Therm Systems, Inc., and Solarex.

"The addition of these new Affiliates brings our roster of corporate supporters to some 65, the largest number in the Society's history," reports C.W. (Clif) Draper, AT&T Technologies, Inc., Chairman of the Society's Corporate Participation Committee.



CLIF DRAPER

Fulfilling its Objective

"The growth of participants in our program of corporate sponsorship demonstrates concretely that the Society is fulfilling its primary objective—serving professionals in the field of materials science and engineering," says Clif.

"This growth also is a tribute to the hard work performed by our Committee," he adds. "But it is due as well to increasing participation in this effort by others in the Society. Our members are becoming our most valuable advocates with corporations and laboratories that are potential Affiliates."

Member Support Vital

Clif stresses: "The active support of MRS members is vital to the continuing growth of this activity. I would urge all members to contact me with suggested Affiliates. Working with you, we can explain the many benefits of the program fully, and demonstrate why participation strengthens our Society, our profession, and our corporate sector." Members can reach Clif at AT&T Technologies' Engineering Research Center in Princeton, N.J. His number is (609) 639-2350.

Clif notes that MRS Corporate Affiliates receive a number of benefits, including literature displays without charge at MRS meetings, announcements in the BULLETIN, a complimentary subscription to the MRS-affiliated letters journal, *Materials Letters*, and various forms of recognition. "We also benefit from suggestions by Corporate Affiliates about topics for possible future symposia," he adds.

Roster of Affiliates

The current roster of the Materials Research Society's Corporate Affiliates includes the following:

Air Products and Chemicals
Allied Corporation
Aluminum Company of America
Applied Materials
ARCO/Solar, Inc.

The active participation of members In recruiting new Corporate Affiliates Is vital to the success of the program

AT&T Technologies (The Engineering Research Center)
Branson, IPC
Brimrose Corporation of America
C-E Power Systems
Chevron
Coherent
Drytek, Inc.
E.I. DuPont de Nemours & Company
Eastman Kodak Company
Eaton Corporation
EG&G ORTEC
Elborg Technology Company
Elsevier North-Holland
Energy Conversion Devices, Inc.
Exxon Research and Engineering Company
GCA Corporation
General Electric Company
General Ionex Corporation
General Motors Research Laboratories
GTE Laboratories
Harshaw/Filtrol
Helionetics
Hitachi Scientific Instruments
Instruments SA, Inc.
International Business Machines Corporation
Jeol USA
Lam Research
Lambda Physik

[Continued on Page 17]

AMORPHOUS METALS

An MRS-Europe Symposium Report

The symposium entitled "Amorphous Metals and Nonequilibrium Processing" was devoted to the connections between various approaches to amorphization of metals, ranging from traditional techniques, such as melt spinning and vapor quenching, to laser irradiation, and from ion-beam mixing to solid-state reaction. Three of the six oral sessions focused on the processes, while the other three concentrated on the properties of amorphous phases as produced by the various processes. In all, the program comprised 49 scientific papers.

A.R. Yavari opened the first session with a survey of the basic kinetic considerations to predict glass formation or crystallization in melt quenching. A number of speakers then discussed technical aspects of melt spinning as well as scanned CW-Laser irradiation, two techniques that yield cooling rates up to about $10^6 K/sec$.

The second day was opened by an excellent plenary talk by H.K.J. Buschow discussing magnetic and electronic properties and showing perspectives on applications of amorphous metals in data recording and storage. The tone for the session on ion beams and chemical processes was set by M.A. Nicolet with a talk on what is and what isn't presently understood about amorphization by ion beams. Exciting new experiments on the amorphization by solid-state reactions were reported by two speakers later in the session. The process is carried out at a temperature too low for crystallization but sufficient for fast diffusion by one of the component species, and promises the production of amorphous alloys of almost arbitrary dimensions. The last session on processes was devoted to ultra-rapid quenching and nanosecond or picosecond laser quenching. Both methods yield cooling rates in excess of $10^{10} K/sec$ and offer a wide range of amorphous alloys, but are basically limited to thin films.

M. VON ALLMEN

The sessions devoted to properties treated the subjects of crystallization, low-temperature properties, and atomic and electronic structures of amorphous metals. Among the highlights were talks on the micromechanisms of crystallization in glassy metals, as compared with those in amorphous semiconductors, and on properties of amorphous metals at very high pressure. A poster session complemented the scientific program of the symposium.

M. von Allmen
Berne, Switzerland

AFFILIATES

[Continued from Page 10]

Lawrence Livermore National Laboratory
LFE Corporation
Los Alamos National Laboratory
Lumonics
Martin Marietta Laboratories
Materials Research Corporation
Microscience, Inc.
Monsanto
Perkin-Elmer
Philips Electronic Instruments, Inc.
Portland Cement Association
Plasma-Therm Systems, Inc.
Quantronix Corporation
Questek, Inc.
Sandia National Laboratories
Schlumberger-Doll Research
Shell Development Company
Solarex
Spectra Physics
Spire Corporation
Standard Oil Company of Indiana
TRW
Tegal Corporation
Union Carbide Corporation
United Technologies Research Center
UOP
Varian/Extrion
W.R. Grace & Company
Westinghouse Electric Corporation
Xerox Corporation
XMR
Zymet

https://doi.org/10.1557/S0883769400050946 Published online by Cambridge University Press