

Welcome to the 1985 MRS Fall Meeting



This year MRS sees two Fall Meetings.

In Strasbourg, France, the European Materials Research Society Fall Meeting runs from November 26 through 29 and focuses on Advanced Materials R & D for Transport. Three symposia treating particular materials issues in the transportation industry will be held in the beautiful Council of Europe facility. To those of you finding this issue of the **BULLETIN** in your registration material in Strasbourg, welcome to the first Fall Meeting of the European MRS. You are participating in a forum specifically designed to enhance communication among materials researchers whose necessarily interdisciplinary approach requires such topically focused symposia. The symposia chairpersons and the local staff have invested a large effort in planning the program and logistics of your meeting, and we are sure you will find this meeting most productive. We would also welcome your continued participation in the activities of E-MRS. You may obtain more information about the Society by contacting the headquarters at the Strasbourg address given in the front of this **BULLETIN**.

In Boston, the annual Fall Meeting convenes December 2 and runs through December 7. On behalf of the Materials Research Society, let me welcome participants arriving in Boston. Normally in describing our ever expanding meeting activities, strings of superlatives are necessary. This 1985 Fall Meeting is certainly no exception. As you see from your program, we have 20 topical symposia covering research at the forefront of their respective fields. We have the ever popular luncheon Symposium X which offers the nonspecialist insight into advances in various materials areas. And, completing the list, we have a wholly new departure for MRS in Symposium Y, which delves into the issues of materials education, a field which is clearly the precursor to the pursuit of all the work reported in our forums.

Taken together this program is the largest yet offered to MRS participants and comprises over 1,250 individual presentations. This is the first year we find MRS activities

running in two hotels and are fortunate to have been able to take advantage of the Boston Marriott/Copley Place and the Westin Hotel which are so convenient to each other.

A great deal of planning is required to bring together a meeting such as this. First and foremost among those who have devoted their time and expertise to this task are the meeting chairs. These are John Baglin of IBM, David Biegelsen of Xerox, and John Fan of the MIT Lincoln Laboratory. The high quality of the program and its coordination can be attributed to the long hours invested by such talented individuals as these and we certainly owe them a debt of gratitude. Each symposium has likewise benefited from the technical excellence and diligence of their respective chairs. These scientists have formulated outstanding programs which will represent the latest, most incisive, advances in their fields by and to their broad interdisciplinary international groups of participants.

Once again the central objective of MRS for its meetings has been superbly fulfilled. Behind the scenes, much of the logistical support for this largest-ever meeting has been provided by the MRS Headquarters staff under the direction of Executive Director John Ballance. With the MRS Headquarters just entering its third year of existence, it has managed this gargantuan task with great success.

In addition to the technical symposia, you will find that this year's Fall Meeting offers a substantially expanded program of short courses. The 14 courses, available on Friday and Saturday of the meeting, were assembled by L. Ralph Dawson, cochair of the MRS Education Committee. Also expanded this year is the MRS Equipment Show run for MRS by the American Institute of Physics. Over 100 booths will display the "implements of our profession" and I encourage all participants to visit the show which is open Tuesday through Thursday. Those attendees who are interested in employment opportunities may take advantage of the MRS Job Placement Center. The Center, which was well utilized the first time it was offered last year, will again be handled for MRS by the AIP Placement

Service.

Let me also invite each participant to attend the Awards Ceremony on Monday, December 2. At that time we will have the distinct privilege of presenting 15 graduate student awards for outstanding papers presented at this meeting and to present the Von Hippel Award to John W. Cahn of NBS. Please join me in honoring our award recipients and in attending the reception which follows.

Beyond the events of the annual Fall Meeting, many more exciting MRS activities have taken place. The Education Committee has implemented the travel grant and speaker tour programs for Student Chapters. New local Sections and Student Chapters are forming, some of which will be chartered at the All-Society Plenary Session on Wednesday, December 4. The first MRS produced proceedings volumes rolled off the presses in 1985. You will find many of these displayed in the meeting registration area. And, *Journal of Materials Research*, the new MRS-owned, AIP published, comprehensive archival journal for our field, has been launched. Since this time last year, the number of full-time Headquarters staff has more than doubled, increasing from three to seven, in order to manage these expanded and new endeavors.

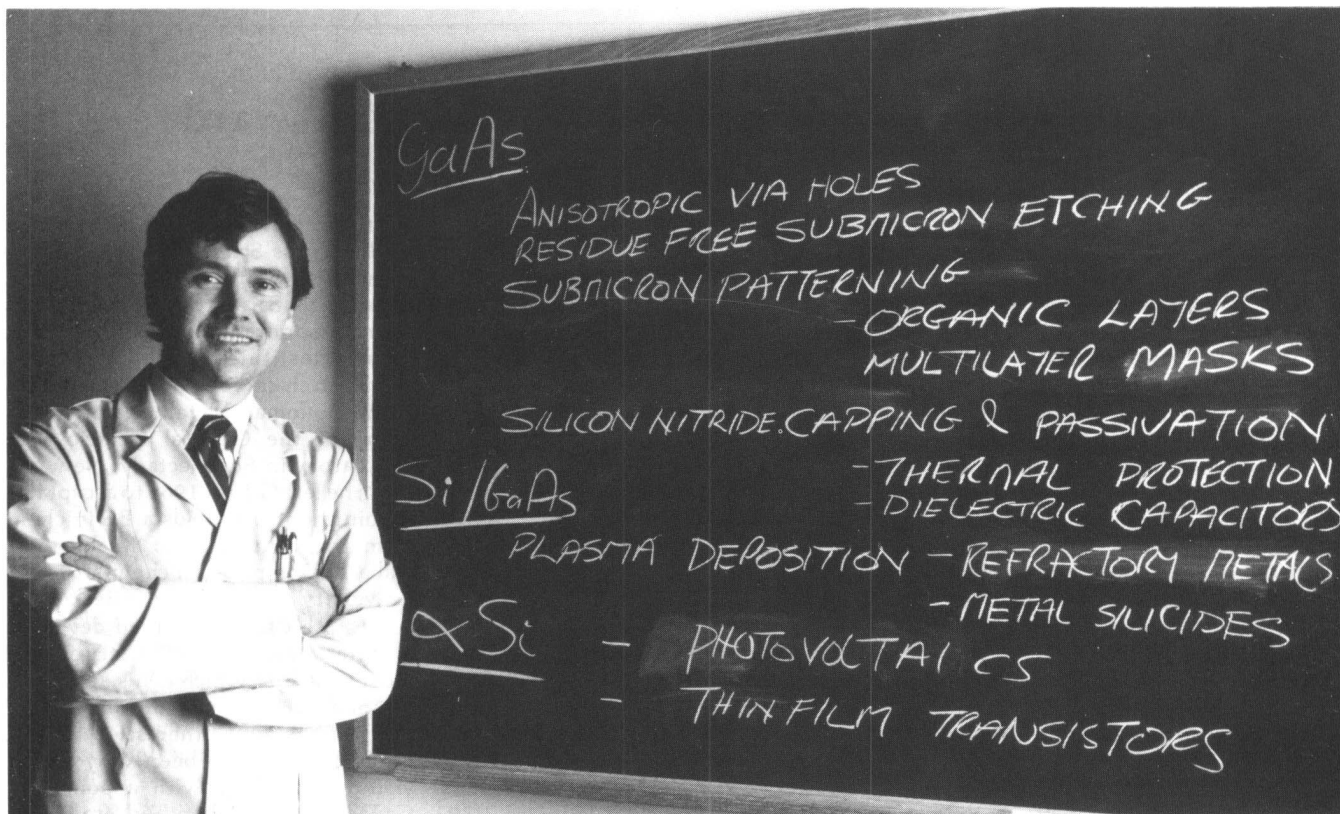
Going largely unnoticed, aside from the occasional note in the **BULLETIN**, is the year-round work of the 11 MRS committees. Much of the activity described above is initiated and overseen by these committees. Their function is vital to the health and vitality of the Society. During the Fall Meeting, the committees meet to formulate plans for the future and assess ongoing programs. These are individual MRS members contributing their talents to the Society's needs. I encourage any and all of you who would like to become involved in MRS and its future to express that interest to any official of MRS during or after the meeting.

In closing, let me wish you, our participants, whether in Boston or Strasbourg, a very productive and stimulating week and an enjoyable stay in our host city.

Elton N. Kaufmann
MRS President

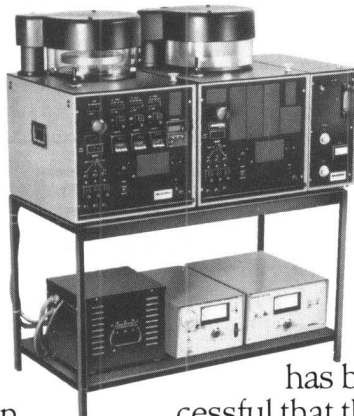
MRS CORPORATE AFFILIATES

AG Associates
Air Products and Chemicals
ALCOA
Allied Corporation
American Microsystems, Inc.
AMOCO Corporation
Applied Materials
ARCO Metals Company
ARCO Solar, Inc.
AT&T Bell Laboratories
AT&T Technologies, Inc.
Blake Industries, Inc.
Branson, IPC
Brimrose Corporation of America
Brush Wellman, Inc.
Cabot Corporation
Cameca Instruments, Inc.
CEMCOM Research Associates
CILAS Alcatel
Combustion Engineering, Inc. — Power Systems
Denton Vacuum, Inc.
Drytek, Inc.
E. I. du Pont de Nemours & Company
DynaVac
Eastman Kodak Company
Eaton Corporation
ELKEM Chemicals, Inc.
Elsevier North-Holland
Energy Conversion Devices, Inc.
Engelhard Corporation
Charles Evans & Associates
Exxon Research and Engineering Company
Ferranti, plc
GCA Corporation
General Electric Ceramics, Inc.
General Electric Company
General Ionex Corporation
General Motors Research Laboratories
GTE Laboratories
Harshaw/Filtrrol
Helionetics
High Voltage Engineering Europa B.V.
Hirst Research Centre
Hitachi Scientific Instruments
Hoya Optics, Inc.
Hughes Aircraft Company
Imperial Chemical Industries, plc
Instruments SA, Inc.
International Business Machines Corporation
JEOL USA
Jet Propulsion Laboratory
Lam Research
Lambda Physik
Lanxide Corporation
Lasertechnics
Lawrence Livermore National Laboratory
Leybold-Heraeus
LFE Corporation
Los Alamos National Laboratory
Lumonics
3M Company
Martin Marietta Laboratories
Materials Research Corporation
Microscience, Inc.
Monsanto
National Electrostatics Corporation
Newport Corporation
Perkin-Elmer
Philips Electronic Instruments, Inc.
Plasma Technology (UK) Ltd.
Plasma-Therm Systems, Inc.
Portland Cement Association
Quantronix Corporation
Questek, Inc.
Rockwell International
Sandia National Laboratories
Schlumberger-Doll Research
Schott Glass Technologies, Inc.
SEH America, Inc.
L. M. Simard, Inc.
SOHIO Chemicals & Industrial Products
Solar Energy Research Institute
Solarex
Spire Corporation
Standard Oil of Indiana
Stauffer Chemical Company
Surface Science Laboratories, Inc.
Tamarack Scientific Co.
Tegal Corporation
TRW
Union Carbide Corporation
United Technologies Research Center
UOP
Varian/Extrion
VG Instruments, Inc.
W. R. Grace & Company
Wacker Siltronic Corporation
Westinghouse Electric Corporation
Xerox Corporation
XMR
Zymet



WE'VE DESIGNED AN R&D PLASMA SYSTEM SO FLEXIBLE, YOU'LL THINK WE MADE IT JUST FOR YOU.

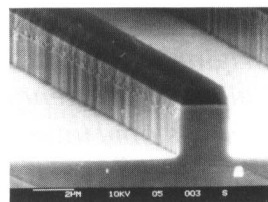
It is called the Plasmalab 80 and consists of a range of modules which allow you to design an R&D system that does exactly what you want it to do; no more, no less. Plasmalab can be configured for all of the principle plasma processes—Planar Etch, RIE, Planar Deposition or Plasma Anodisation. A basic Plasmalab may consist of only a single work chamber and flow controller; however, because Plasmalab is modular, you can choose from a long list of options to create a sophisticated development system. Your options include: dual process chambers, high and low frequency RF, mass flow controllers, heated electrodes, temperature control, process sequencers, and even interchangeable electrodes so that you can convert the chamber from one process to another.



And Plasmalab is not just hardware. It is supported by Plasma Technology's process know-how and a fully equipped applications laboratory. We can advise you on process chemistries for a wide range of applications and demonstrate our capabilities in the laboratory. The modular concept of Plasmalab

has been so successful that there are already 140 installations in use worldwide pioneering new processes in silicon and GaAs technology.

(The inset shows a 2µm x 2µm Reactive Ion Etched structure in GaAs*). Plasmalabs are available worldwide through the offices and agents of Plasma Technology Ltd.



MICROSCIENCE INC.

Forbes Business Center, Suite 125, 182 Forbes Road, Braintree, MA 02184. Tel. 617-849-1952 Telex 750 480

Europe and Elsewhere:

Plasma Technology Ltd., Lawrence Road, Wrington, Avon, BS18 7QF. Tel. (0934) 862677 Telex 449488

*Photo courtesy of SERC Central Facility for 3-5 semiconductors University of Sheffield UK.