

Materials Education Through the MRS Short Course Program

The Materials Research Society has developed a distinctive and unique short course program. For this issue of the MRS BULLETIN which highlights materials education, MRS members should be aware of the philosophical objectives of the MRS Short Course Program which make it different from other short course programs available to the professional community.

One way the MRS Short Course Program is different from those presented by other organizations is related to the unique nature of MRS meetings themselves. MRS meetings are composed of topical symposia drawn from the fastest growing areas of materials research. The short course program is designed to provide an educational service to meeting attendees by offering some courses that directly complement symposium topics.

The selection and/or development of courses to be offered at an MRS Spring or Fall Meeting begins with an analysis of the symposia to be presented. Courses are then tailored and scheduled to complement the symposia. As an introduction to growing areas of research and especially where new skills can have broad applicability, short course attendance is an excellent background for symposium participants. An example of this approach was the course on Fractals in Materials Science, which preceded the symposium on fractals at the 1986 MRS Fall Meeting. Over 75% of the course attendees also participated in the technical meeting.

This theme was continued at the 1987 MRS Spring Meeting, during which short courses on Rapid Thermal Processing, Ion Beam Processes for Materials Modification, and Amorphous Semiconductor Materials and Devices were carefully scheduled to complement symposia on the same subjects. The short course program at the 1987 MRS Fall Meeting will offer High Temperature Superconductors, Molecular Beam Epitaxy, Microelectronic Packaging, Fractals, Ion Beam Processes for Materials Modification, Introduction to Polymers, and Electron Microscopy of Thin Films, all directly complementing the symposia at this meeting.

One other unique feature of the MRS Short Course Program is that quite often a high percentage of the course attendees have PhDs, and most of the other attendees have master's or bachelor's degrees. The overall technical level of the course presentations is aimed at the practicing researcher. In this time of rapid progress in materials science and technology, the MRS Short Course Program is following in the MRS tradition by presenting

information on topics in emerging technologies, attracting not only those changing career emphasis, but also those already working in the field who wish to be updated on the current state of the art. It is a tremendous challenge to the Education Committee to find excellent instructors who are in the forefront of their fields, and who are also willing to share their knowledge in a teaching environment.

In an effort to assist the academic community, the MRS Short Course Program offers scholarships to qualified graduate and undergraduate students in all courses without requiring their membership in the Society.

The concept of "technology transfer" forms a basic philosophy of the MRS Short Course Program. One of the best examples of the success of this emphasis within MRS is the On-Site Short Course Program. Almost all the courses are available for presentation at the site of a requesting organization, depending upon the availability of the instructor.

Last year one organization asked if MRS offered a short course on solid lubricants. The answer then was no, but MRS could arrange to develop a course to be ready for presentation within five months. This was, in fact, accomplished. The organization was so pleased with the new course devel-

oped at their specific request that they asked for a repeat presentation within the next few months. The course, Solid Lubricants and the Tribological Properties of Solids in Contact, is now part of the MRS course roster. It would be hard to give a better example of an immediate and real educational service provided by the MRS Short Course Program to industry. It is especially gratifying when industry asks MRS to provide an educational service which is apparently not available elsewhere in the country.

The MRS Short Course Program offers an opportunity for scientists, engineers, managers, and technical personnel to obtain the latest information on a number of diverse topics which relate to materials science and technology. This is accomplished in the intense short course environment of one-, two-, and three-day short courses. For people who are changing fields, who need answers to specific problems, or who just want an overall view of a subject, the opportunity to interact with acknowledged experts in the field is of great value. The MRS Short Course Program provides cutting-edge and continuing materials education. The entire portfolio of MRS courses is listed elsewhere in this issue.

Vivienne Harwood Mattox
MRS Short Course Manager

1987 MRS SPRING SHORT COURSE PROGRAM

The 1987 MRS Spring Short Course Program held recently in Anaheim, CA marked the second time that MRS short courses were presented on the West Coast. Of the 20 courses presented, many directly complemented the MRS Spring Meeting symposia or were designed to be of interest to industry in the southern California area. The program was an outstanding success, with course attendance significantly higher than in the Spring of 1986.

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Quantachrome, Nanosil, Sula Technologies, Spire Corporation, JEOL USA, Hitachi Scientific Instruments, American Instruments Inc., Perkin-Elmer, Edgewood Inc, R.D. Mathis, Morton Thiokol, and Surface Science Laboratories. Several professional societies also provided cooperative support for the program.

Appreciation is extended to the many individuals who worked hard to make the program successful. This list includes not only the MRS members and previous short course attendees who are willing to tell their colleagues about the program, but also the MRS Education Committee, the Society officers, and the MRS headquarters staff. Special thanks are due to the dedicated short course instructors, without whom there would be no MRS Short Course Program.

Vivienne Harwood Mattox, MRS Short Course Manager
Alton D. Romig, Jr., Education Committee Cochair