

ADVMAT/91 Announces Keynote Speakers

Three distinguished scientists involved in advanced materials research will lead the technical program at the first International Symposium on Environmental Effects on Advanced Materials to be held June 19 - 21, 1991 at the Catamaran Resort Hotel in San Diego, California. The symposium is presented for scientists and engineers dealing with the development and application of advanced materials. It will also provide an international forum for discussion of the mechanisms and control of environmentally induced degradation in advanced metal, polymer, ceramic, and composite systems.

Three keynote presentations, in the area of environmental effects on advanced metals, polymers, and ceramics, will be made by Ron Latanision, professor in the Department of Materials Science and Engineering at the Massachusetts Institute of Technology (Advanced Metals and Alloys); Luigi Nicolais, professor in the Department of Materials and Production Engineering at the University of Naples (Polymeric Materials and Composites); and Masahiko Shimada, professor in the Department of Applied Chemistry at Japan's Tohoku University (Ceramic Materials).

The keynote presentations will be made in a joint session kicking off the program. They will be followed by plenary lectures focusing on engineering applications of advanced materials and the impact of environmental effects on materials requirements.

Further details regarding the symposium are given in a brochure available from

the NACE Customer Service Department, P.O. Box 218340, Houston Texas 77218; (713) 492-0535, ext. 81; fax (713) 492-8254.

The symposium is sponsored by the National Association of Corrosion Engineers (NACE), cosponsored by the American Society of Testing and Materials (ASTM), and is endorsed by the Materials Research Society (MRS).

Seventh Oxford Conference on Microscopy of Semiconducting Materials Scheduled for 1991 Abstracts Being Accepted

The 7th biennial conference on Microscopy of Semiconducting Materials, to be held March 25 -28, 1991 at Oxford University, will focus on the latest developments in the application of transmission and scanning electron microscopy to the study of the structural and electrical properties of semiconductors. Recent advances in the use of other micro-characterization techniques such as x-ray topography, atom probe microanalysis, scanning tunnelling microscopy and ion backscattering spectrometry will also be featured.

Subject areas to be covered include the characterization of as-grown semiconductors in both bulk and thin film forms, the study of lattice defect and impurity behavior, and the investigation of the effects of semiconductor processing treatments. Special conference sessions will concentrate on recent advances in high resolution electron microscopy studies, the properties of dislocations, the nature of epitaxial layers, quantum wells and superlattices,

the characteristics of metal-semiconductor contacts and silicides, semiconductor microanalysis, and the effects of device processing treatments.

Provisionally, the invited speakers and the topics they'll speak on are as follows: P.E. Batson (IBM, Yorktown Heights), *Microanalysis Using EELS*; R. Bowen (University of Warwick), *Advances in X-ray Studies*; H. Cerva (Siemens, Munich), *TEM in Si Technology*; D. Cherns (University of Bristol), *CBED Studies of Quantum Wells*; J. -P. Chevalier (CECM, Vitry-sur-Seine), *Epitaxy on Misoriented Substrates*; R. Hull (AT&T Bell Laboratories, Murray Hill), *Relaxation of Heterostructures*; N. Inoue (NTT, Atsugi) *In Situ Microscopy of MBE Growth*; S. J. Pennycook (Oak Ridge National Laboratory), *Developments in Z-Contrast Imaging*; D. J. Smith (Arizona State University), *Advances in HREM Studies*; D. J. Stirland (Plessey Research, Caswell), *Structure on Bulk GaAs*; and R. H. Williams (University of Wales, Cardiff), *Ballistic Electron Emission Microscopy of Contacts*.

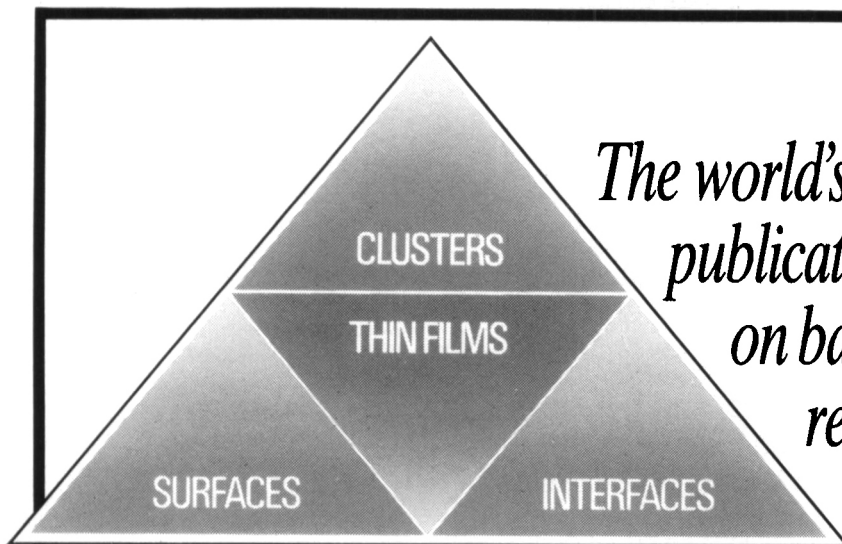
The conference proceedings will be published, and contributed papers are requested in all the areas outlined above. The deadline for submitting papers is December 1, 1990. Further information about submitting abstracts, and registration can be obtained from: conference co-chairman A.G. Cullis, Royal Signals & Radar Establishment, St. Andrews Road, Malvern, Worcs, WR14 3PS, United Kingdom; UK-684-894509; fax UK-684-894540.

The conference is organized under the auspices of the United Kingdom Institute of Physics and the Royal Microscopical Society, and is endorsed by the Materials Research Society. □

New Short Course Added to MRS Fall Meeting Schedule

A new Short Course, CHARACTERIZATION OF COMPOUND SEMICONDUCTORS BY HIGH RESOLUTION X-RAY DIFFRACTION (C-23), has been added to the 1990 MRS Fall Meeting roster and will be presented on Monday, November 26, 1990. Instructors are M. Halliwell, head of the X-Ray Diffraction Group at British Telecom Research Laboratories, and T. W. Ryan, leader of the High Resolution X-Ray Diffraction Product Development Group at Philips Analytical, the Netherlands. The course is intended for materials scientists and engineers interested in the fundamentals of high resolution x-ray diffraction as applied to the measurement of epitaxial thin films and superlattices, and will include an overview of the basic principles of HRXRD. It will cover multiple crystal x-ray optics and the generation of x-ray rocking curves, simple analysis of thin film composition and thickness, superlattice structure, the use of asymmetric diffraction geometries applied to the measurement of strain and relaxation, specular reflectivity, Bond's method, advanced interpretation of HRXRD patterns, dynamic and kinematic simulation, and length scale determination.

To register for this course or any of the other short courses to be presented during the 1990 MRS Fall Meeting in Boston, call (412) 367-3003.



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