#### INFOS '87 to be Held in Belgium

INFOS '87, the Fifth International Conference on Insulating Films on Semiconductors will be held April 13-15, 1987 in Leuven, Belgium. Sponsored by the Interuniversity Microelectronics Center in Leuven, the conference will bring together specialists in preparation methods, characterization techniques, and applications of organic and inorganic thin film insulators on semiconductors (including silicon, III-V and II-IV compound semiconductors, and amorphous semiconductors). The preparation and materials properties of amorphous, polycrystalline, and crystalline silicon-on-insulator structures will also be covered.

Papers will be presented in English in the following areas:

Advances in Film Preparation Techniques - thermal growth or deposition; chemical, physico-chemical or mechanical deposition; ion implantation; plasma, photochemical, laser, ion beam, and other means of enhancement.

Analysis of Film and Interface Structure, Composition, and Properties — information from physical, chemical, or electrical techniques; physical, electrical, and optical properties.

Reliability Aspects — detection and role of defects and impurities; charges, interface states, traps; radiation effects.

Novel films for new applications.

For further information, contact Roger De Keersmaecker, Interuniversity Microelectronics Center, Kapeldreef 75, 3030 Leuven, Belgium; telephone 32 (16) 281326; telex 26152.

### **SPIE 31st Annual** International Technical Symposium on Optical and **Optoelectronic Applied** Science and Engineering

SPIE — The International Society for Optical Engineering will hold its 31st Annual International Technical Symposium on Optical and Optoelectronic Applied Science and Engineering August 16-21, 1987 in San Diego, CA. The meeting will highlight the latest developments in the many areas of optical engineering and will, for the first time, be held in conjunction with O-E/Fibers '87, SPIE's yearly meeting on fiber optics and integrated optical circuits. Twenty-two technical conferences, a critical review of technology, and complementing tutorials are scheduled. Conference topics, which have been selected to balance representation of important established areas of optical engineering with the newly emerging areas of

popular interest, include the following: Optomechanical Systems Engineering Photomechanics and Speckle Metrology Interferometric Metrology: Critical Review of Technology

Grazing Incidence Optics for Astronomical and Laboratory Applications

X-Rays from Laser Plasmas

Optical Materials Technology for Energy Efficiency and Solar Energy Conversion Advances in Nonlinear Polymers and Inorganic Crystals, Liquid Crystals, and Laser Media

Raman and Luminescence Spectroscopy in Technology

Application and Theory of Periodic Structures, Diffraction Gratings, and Moire Phonomena

Solid-State Focal Plane Arrays

Current Developments in Optical Engineering

IR Technology

Modeling of Optical Thin Films High-Speed Photography, Videography, and Photonics

Airborne Reconnaissance

High Bandwidth Analog Applications of **Photonics** 

Imaging Spectroscopy Advanced Algorithms and Architectures for Signal Processing

Spatial Light Modulators and Applications

Real-Time Signal Processing Applications of Digital Image Processing Digital Image Recovery and Synthesis

For information contact SPIE, P.O. Box 10, Bellingham, WA 98227-0010; telephone (206) 676-3290; telex 46-7053.

#### SPIE Announces O-E/Fibers '87

SPIE's yearly symposium on fiber optics and integrated optical circuits, O-E/Fibers '87, will be held August 16-21, 1987 in San Diego, CA in conjunction with SPIE's 31st Annual International Technical Symposium on Optical and Optoelectronic Applied Science and Engineering. O-E/Fibers 87 will present ten conferences on the following topics: optoelectronic materials and devices, integrated optical circuit engineering, optoelectronic packaging and interconnects, fiber optics and laser sensors, components for fiber optic applications, vehicular applications of fibers, fiber optic networks, fiber optics reliability benign and adverse environments, IR optical materials and fibers, and coherent technology in fiber optic systems.

For information contact SPIE, P.O. Box 10, Bellingham, WA 98227-0010; telephone

(206) 676-3290; telex 46-7053.

#### SHORT COURSE

# Transmission Electron Microscopy of Materials

June 8-12, 1987

## Massachusetts Institute of Technology Cambridge, MA

This short course will present a comprehensive view of modern transmission and scanning transmission electron microscopy. Both lectures and laboratory exercises will provide the background and training necessary to bring the beginning microscopist to state-of-the-art practice. The 15 hours of laboratory work will treat manipulation of the instruments, information to be gained from diffraction patterns, bright-field and dark-field microscopy, high resolution TEM, and microanalysis. Examples will be drawn from the areas of metals, ceramics, semiconductors, and polymers.

This short course will interest industrial personnel engaged in microstructural analysis for research, development, or quality control purposes. In addition, the course may interest university researchers, students, staff or faculty who wish to be aware of current developments in electron microscopy. It is an appropriate in-depth sequel to the MRS introductory short course on TEM and can additionally serve as an effective introduction to an advanced course on analytical electron microscopy.

Application forms are available from: The Director, Summer Session, MIT, Room E19-356, Cambridge, MA 02139, [617] 253-2101; or from Prof. Linn Hobbs, MIT, Room 13-4062, (617) 253-6835; or Prof. John Vander Sande, MIT, Room 13-5025, (617) 253-6933