

## Positions Available

### FACULTY POSITIONS University of Southern California Materials Science

The Materials Science and Engineering Department of the University of Southern California has available openings at all ranks for tenure-track faculty positions. Applicants should have a doctorate in Materials Science or in a related area of science or engineering. Successful candidates will be expected to initiate and build up strong self-sustaining graduate research programs—especially in cooperation with other ongoing programs—and to teach and develop new graduate courses. We encourage applicants with experience in, but not limited to, electron microscopy, electron, ion and photon beam interactions with solid surfaces in UHV, epitaxial growth and properties of ultrathin layers of various semiconductors, metals or insulators, structure and properties of interfaces between thin electronic materials, and the preparation of high T<sub>c</sub> superconducting films, particularly on semiconductors (part of a potential interactive program involving both the Physics and the Electrical Engineering Departments).

Applications, resumes, recent reprints and the names of four references should be sent to:

Prof. M. Gershenson  
Chairman of Search Committee  
Department of Materials  
Science and Engineering  
University of Southern California  
Los Angeles, CA 90089-0241  
Telephone (213) 743-6215  
Fax (213) 746-4864

USC is an equal opportunity/affirmative action employer, and applications from minorities and women are welcome.

### ARIZONA STATE UNIVERSITY Center for Solid State Science Research Specialist Structure of Materials at Surfaces & Interfaces

This tenure-track position is associated with the Science and Engineering of Materials Program. The position carries dual responsibilities with approximately equal effort to be devoted to each: original research dealing with the structure and properties of material surfaces and interfaces, and assistance/collaboration for other researchers using UHV electron microscope instrumentation within the NSF-ASU High Resolution Electron Microscopy Facility. The successful applicant will be encouraged to participate in ongoing research dealing with materials surfaces and interfaces, and expected to eventually establish an independent externally funded research program in that area. Formal classroom teaching is not required. Practical experience in electron microscopy and/or surface research is essential. A doctorate in materials science, solid state physics, solid state chemistry or a directly related field is required. Salary and benefits are competitive.

To apply, send resume (if not a U.S. citizen, indicate visa status) and the names and addresses of three referees to R.W. Carpenter, Director, Center for Solid State Science, PSB-234, Arizona State University, Tempe, AZ 85287-1704. Application deadline is April 1, 1990, and the first day of each month thereafter until the position is filled.

Arizona State University is an Affirmative Action/Equal Opportunity Employer.

### ARIZONA STATE UNIVERSITY Center for Solid State Science Research Specialist Synthesis Reactions at Material Interfaces

This is a tenure-track research position associated with the Science and Engineering of Materials Program, devoted to research on materials synthesis reactions at interfaces. It is principally directed to synthesis of new material interfaces. Interest and experience in relating the macroscopic behavior to microscopic structure and chemistry of interfaces is desirable. Typical materials of interest are composites for structural and for electrical applications. Examples are metal/metal oxide composites and composite solid electrolytes.

The successful applicant for this position will be expected to devote approximately half his or her effort to performance of original research within this broad topical area, will be encouraged to collaborate with established researchers here doing related research, and will be expected to eventually establish an independent externally funded research program. In addition, this researcher will be expected to assist other researchers, including graduate students, with research instrumentation germane to this subject. No formal classroom teaching is required. A doctorate in materials science, ceramics, solid state physics, solid state chemistry or directly related field is required. Salary and benefits are competitive.

To apply, send resume (if not a U.S. citizen, indicate visa status) and the names and addresses of three referees to R.W. Carpenter, Director, Center for Solid State Science, PSB-234, Arizona State University, Tempe, AZ 85287-1704. Application deadline is April 1, 1990 and the first day of each month thereafter until the position is filled.

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## SCIENTISTS/ENGINEERS/ TECHNICIANS

SOLAREX CORPORATION, Thin Film Division, a wholly owned subsidiary of AMOCO, has several openings for Scientists, Engineers, and Technicians in the R&D department. These challenging research opportunities exist for highly qualified and motivated individuals with strong backgrounds in materials science and/or solid-state devices. Positions require individuals with hands-on experience who can join a group of dedicated scientists involved in developing state-of-the-art thin film solar cells and modules.

Openings exist at all levels, but individuals with demonstrated experience in photovoltaic materials and devices will be given preference. In addition, Technician positions require an AA in a scientific or technical discipline; Engineering positions require a BS in EE/Physics/Chemistry; Scientific positions require a PhD in EE/Physics/ Material Sciences.

In addition to a competitive salary, Solarex offers a competitive benefit package, including health and dental insurance, tuition reimbursement and a 401(k) salary deferral program. Please send resume and salary history in confidence to:

Solarex Thin Film Division  
Human Resources — 8914R  
826 Newtown-Yardley Road  
Newtown, PA 18940

Solarex is an equal opportunity employer, m/f/h/v.



## Positions Available

### FACULTY POSITIONS

#### University of Alabama Department of Metallurgical & Materials Engineering

The Department of Metallurgical and Materials Engineering has one tenure-track faculty position at the assistant professor level beginning August 16, 1990. Applications are sought from candidates with an interest in physical metallurgy. Experience is particularly desired in one or more of the following areas: microstructural characterization (SEM and TEM), mechanical behavior, electronic/magnetic materials, ceramics, and composite materials. The successful applicant will be expected to teach at both the undergraduate and graduate level, and to develop a strong research program.

Candidates should possess a recent PhD in metallurgy or materials science or a related field. Please send a resume and the names of three references to Prof. Doru M. Stefanescu, Chairman of the Search Committee, Department of Metallurgical and Materials Engineering, The University of Alabama, Box 870202, Tuscaloosa, AL 35487-0202.

Applications will be accepted until the position is filled with the review process beginning March 20, 1990.

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Affirmative Action Employer.*

### FACULTY POSITION

#### Materials Science and Engineering Stevens Institute of Technology

The Department of Materials Science and Engineering is seeking applicants for a tenure-track position at the assistant professor level. Effective teaching in ceramics and counseling on both the undergraduate and graduate level. Conducting basic and/or applied research in ceramics and their high-temperature degradation. Participation in professional activities appropriate to the above responsibilities in professional societies, or industrial and government agencies. Participation in institutional committees and functions. Doctoral degree in materials science and engineering plus demonstrated research potential are required. Must be U.S. citizen or work authorized. Send resume and three references no later than April 1, 1990 to:

Dr. Bernard Gallois  
Department of Materials Science  
and Engineering  
Stevens Institute of Technology  
Hoboken, NJ 07030

*Stevens Institute of Technology is an affirmative action/equal opportunity employer.*

**Elsevier Science Publishers B.V. (ESP)** is the science publishing company of the Elsevier Group with companies in England, U.S.A. and the Far East. ESP publishes several hundreds of journals, books as well as electronic products in the fields of science and biomedicine. The Physical Sciences and Engineering Division is seeking an

The successful candidate will have a degree, but preferably a Ph.D., in physics, chemistry or a materials science discipline. In addition to a formal academic training, the candidate will have had a number of years of working experience in a university, industrial or other environment. Previous publishing experience would be an advantage but all candidates with relevant experience in materials science will be considered. A good command of English is essential. The position is based at our head office in Amsterdam (The Netherlands).

## acquisition editor m/f

(full time)

for the materials science/solid state physics section.

You will be joining an experienced and highly motivated team involved in the management and development of an international publication programme in materials science which ranges from fundamental solid state physics to materials processing.

Your responsibilities will involve:

- close cooperation with our scientific advisors
- management of a selection of our international journals
- maintenance and expansion of our publication programme, journals, books and new media.

You will spend circa eight weeks a year travelling in Europe, North America and elsewhere in order to establish contacts with potential editors and authors. The position demands the talents of a self motivated and outgoing individual with sound commercial sense who can contribute to the maintenance and development of the high scientific and editorial standards of our materials science publishing programme.

We offer a challenging career opportunity to those graduates who wish to develop in a commercial environment with a very successful company in a competitive market. An excellent remuneration package with attractive benefits will be offered.

For further information contact Dr. H.E. Roosendaal (tel. 31-20-5862512), Dr. J.G. Kircz (tel. 31-20-5862589) or Dr. B. van der Hoek (tel. 31-20-5862510).

Your application, mentioning number 408/200/NA can be sent - within 3 weeks - to ESP Personnel Department, Physical Sciences and Engineering Division, P.O. Box 2400, 1000 CK Amsterdam, The Netherlands.



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SCIENCE PUBLISHERS B.V.

## CLASSIFIED

### Positions Available

#### FACULTY POSITIONS

##### The Johns Hopkins University Materials Science & Engineering

The Department of Materials Science and Engineering at The Johns Hopkins University is seeking applicants to fill tenure-track positions at the assistant professor level. The applicants selected will be expected to teach at both the undergraduate and graduate levels, as well as to develop innovative and imaginative research programs. Genuine commitment to excellence in teaching and supervision of graduate student research is cardinal. Areas of research activities in the Department are: materials characterization (nondestructive evaluation methodology); polymers, ceramics and composites; corrosion and electrochemistry; mechanical and physical properties of thin films; fracture of solids; and conservation science. Candidates should submit a resume which includes their professional achievements as well as the names, addresses and telephone numbers of at least three references. Applications should be submitted no later than **March 31, 1990** to:

Prof. Moshe Rosen, Chairman  
Department of Materials Science and Engineering  
The Johns Hopkins University  
Baltimore, Maryland 21218

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#### MANAGER OF ELECTRON MICROSCOPY FACILITY

##### Cornell University Materials Science Center

The Manager of the Electron Microscope Facility will be responsible for training new users and supervising the operation and maintenance of the equipment in the facility. In addition to assisting students, faculty and staff in the application of EM, the manager will be responsible for all administrative needs of the facility. A PhD in materials science or physics and a minimum of 2 years postdoctoral experience is required. The successful applicant will be familiar with all aspects of EM imaging, particularly HREM, and with STEM, EDS, EELS and CBED. A thorough familiarity with image simulation and processing is essential. The facility is presently equipped with 5 JEOL machines (35CF, 733, 1200FX, 200CX and 4000EX) with direct access to the MSC Convex C2 mini-supercomputer. The starting salary will be commensurate with experience and qualifications. Applications and resume, with the names of three references, should be addressed to Prof. C. Barry Carter. Consideration of applications will begin February 14, 1990, and continue until the post is filled.

Prof. C. Barry Carter  
Department of Materials Science & Engineering  
Bard Hall, Cornell University  
Ithaca, NY 14853

*Cornell University is an Equal Opportunity, Affirmative Action Employer.*

#### RESEARCH ASSOCIATE

##### High-Temperature Arc Heating Devices

Develop high-temperature heat source utilizing electrical arc for electrical and scientific measurement. Design, operation and use of dc plasma arc heating system for materials processing including smelting, melting, plasma spraying and surface coating processes. Study physical interaction of multiple arc discharges. Plasma melting, plasma arc interaction studies including research plan for arc interaction with dc plasma arc electrodes and experiments in arc behavior. Study effects of gas/gas stabilization. Instrumentation coordinating basic instrumentation needs of plasma process laboratory, plasma imaging involving developing high resolution video imaging systems to study plasma jet behavior in deposition and melting and provide data for input to computer for image analysis and comparison for plasma jet analysis. REQ: PhD EE and 2-4 yrs. exp. w/research in design and operation of plasma torches and systems and measurement techniques to high-powered dc plasma systems. Exp. must involve design and specification of components of plasma furnace and reactor systems and use of assorted types of thermocouple and associated recordings/indicating instruments. Must have background in use of wide range of refractory and thermal insulation materials and state-of-the-art knowledge in torches. 40 hrs./wk.; \$31,000/yr.; submit resume or CV to Philadelphia Job Bank, J.O. #4304886, 444 N. 3rd St., 3rd floor, Philadelphia, PA 19123.

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#### TECHNICAL EDITOR

##### Materials Research Society

The Materials Research Society, headquartered in Pittsburgh, seeks a creative and assertive leader to serve as editor of a rapidly growing monthly magazine serving materials research professionals. Responsibilities include establishing issue themes, acquiring and evaluating technical overview articles, writing and directing the rewriting of articles, and soliciting and evaluating news from government, industry, and education. Master's degree in a technical field relevant to materials science and engineering required and knowledge of current developments in one or more major materials research areas desirable. Well organized individual sought with strong writing and editing skills and prior experience in writing and editing for publications serving the technical community. Salary and benefits commensurate with experience. Send resume, samples of writing, names of two references, and relevant salary history to Chairman of Technical Editor Search Committee, Materials Research Society, 9800 McKnight Road, Pittsburgh, PA 15237.