

**Positions Available**

**POSTDOCTORAL FACULTY RESEARCH**

A postdoctoral faculty research associate position is available for research on the structure of supported catalysts and related materials by use of electron-optical techniques, and for the development and evaluation of special techniques relevant for this research. Applicants must hold a PhD in physics or related field, and have at least one year of postdoctoral research. Experience is required in the use of UHV scanning transmission electron microscopy and associated techniques including HAADF imaging, high resolution secondary electron microscopy, and Auger electron imaging and nanodiffraction, as well as high resolution and conventional transmission electron microscopy.

Salary \$30,000 for 12 months. Proof of authorization to work in U.S. required if hired. Applications, with three letters of reference, should be addressed to Dr. J.M. Cowley, Department of Physics and Astronomy, ASU, Tempe, AZ 85287-1504. Deadline: **October 15, 1991**, and every two weeks thereafter until the position is filled.

*Arizona State University is an AF/EOE employer.*

**RESEARCH - FACULTY POSITION**

The Basic Metals Processing Research Institute of the Department of Materials Science and Engineering at the University of Pittsburgh has a non-tenure track faculty position at the senior research associate level to begin no later than November 1, 1991. Applicants are sought from candidates with an interest in physical metallurgy. Strong experience is essential in the area of microstructural characterization (recrystallization, precipitation and phase transformations) of MA, HSLA and other modern steels, and superalloys. Candidates must have a minimum of 5 years of experience using advanced techniques of STEM/TEM, APFIM and high temperature dilatometry. Duties will include teaching undergraduate courses and initiating and actively engaging in graduate research.

Candidates should possess a PhD in metallurgy or materials science and engineering. Please send a resume and the names of three references to Prof. A.J. DeArdo, Director of the Basic Metals Processing Research Institute, University of Pittsburgh, 848 Benedum Hall, Pittsburgh, PA 15261.

Applications will be accepted until the position is filled with the review process beginning October 15, 1991.

*The University of Pittsburgh is an Equal Opportunity, Affirmative Action Employer.*

**FACULTY POSITION  
MECHANICAL BEHAVIOR  
OF MATERIALS  
Department of Mechanical  
Engineering  
Massachusetts Institute  
of Technology**

The Department of Mechanical Engineering at the Massachusetts Institute of Technology invites applications for a tenure-track faculty position in mechanical behavior of materials. The selected candidate will be expected to teach subjects in mechanical behavior of materials and closely related areas at both the undergraduate and graduate level, and to develop strong research programs combining both theoretical and experimental approaches in the broad area of phenomena, processes, and mechanisms controlling the mechanical performance of engineering materials. In research, an emphasis on the mechanistic approach, starting from the atomic level and directed up to the continuum level, as may be required, will be most desirable.

Preferences will be given to applicants at the assistant professor level although outstanding candidates at all levels will be considered. Interested individuals should send a curriculum vitae, including a statement of present and future research interests and the names and addresses of at least three/four references to:

Prof. Nam P. Suh  
77 Massachusetts Avenue,  
Room 3-174  
Cambridge, MA 02139

*MIT is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply. Applications received by October 31, 1991 will be given full consideration.*

**Position Wanted**

**Polymer Scientist.** PhD (expected in October 1991) chemical engineering. Seeks research and development opportunity. Strong background in synthesis and structure-property relationships of liquid crystal monomers and polymers. Hands-on experience in DSC, TGA, NMR, UV/VIS/NIR, IR, GPC, HPLC, TLC and polarized optical microscopy. Location and salary open. Reply to Box 9-10, c/o MRS Bulletin.

**TO REPLY TO BOX NUMBER, WRITE:**

Box No. \_\_\_\_\_, c/o MRS Bulletin  
Materials Research Society  
9800 McKnight Road  
Pittsburgh, PA 15237

**Director, National Center  
for Electron Microscopy**

**T**he Lawrence Berkeley Laboratory (LBL) invites applicants for the position of Director of the National Center for Electron Microscopy. The successful candidate will be responsible for managing all aspects of the operation and utilization of the Center, a User Facility funded by the U.S. Department of Energy through the Material Sciences Division at LBL. He/She will be charged with providing direction for acquiring new equipment, developing advanced microscopy techniques, providing outstanding user services and fostering forefront internal research programs.

Candidates should have a multidisciplinary research background with broad-based understanding of theoretical and practical principals in electron-optical instrumentation and their applications in materials, physical, or biological sciences. Proven track record of excellence in electron microscopy is required. A good communicator, she/he should be able to aggressively promote the use of the Center by scientists from the nation and abroad. Demonstrated ability to solicit funding from government and industrial sources would be an asset. The position is available October 1, 1991.

Please send your resume (specify Job #B/6697), three letters of reference and publication list to: Lawrence Berkeley Laboratory, Employment Office, Mailstop 90-1042, Berkeley, CA 94720. Lawrence Berkeley Laboratory is an Equal Opportunity, Affirmative Action Employer.



**LAWRENCE BERKELEY LABORATORY**  
UNIVERSITY OF CALIFORNIA  
U.S. Department of Energy

**Positions Available**

**FACULTY POSITION IN MATERIALS SCIENCE AND ENGINEERING**

**The Johns Hopkins University**

The Department of Materials Science and Engineering at The Johns Hopkins University is seeking applicants to fill a tenure-track position. 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 essential. 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. Applicants for positions other than assistant professor should have a demonstrated record of extensive research support. Applications should be submitted no later than **December 15, 1991** to: Prof. Moshe Rosen, Chairman, Department of Materials Science and Engineering, The Johns Hopkins University, Baltimore, Maryland 21218.

*The Johns Hopkins University is an Equal Opportunity, Affirmative Action Employer.*

**VISITING SCIENTIST NANOSTRUCTURE MATERIALS**

UES, Inc. is seeking a visiting scientist to initiate a strong research program in the area of nanostructure materials. The candidate will be responsible for developing experimental techniques for processing nanocrystalline materials and understanding their mechanical behavior. This position requires a PhD in materials science or related discipline. Candidates must have hands-on experience in some or all of the following areas: (1) UHV technology, (2) high-rate vapor deposition, (3) thin films, (4) engineering design and fabrication of nanophase synthesis equipment, (5) ultra-fine powder synthesis and processing, and (6) mechanical behavior.

The research will be performed at the Air Force Materials Laboratory. The successful candidate will have the opportunity to utilize state-of-the-art research facilities and collaborate/interact with scientists from various disciplines. Resumes should be directed to: Personnel (Dept. #PR) UES, Inc., 4401 Dayton-Xenia Road, Dayton, OH 45432-1894.

**RMIT**

**Microelectronics & Materials Technology Centre**

**Post Doctoral Fellow**

**— 2 Positions**

**Salary Range: \$33,163-\$43,096**

Applications are invited for two post doctoral positions within the Microelectronics and Materials Technology Centre (MMTC) at RMIT.

The MMTC has major research activities in growth, modification and characterization of electronic materials, semiconductor device processing and modification and characterization of non-semiconductor materials and films. The areas underlie applied programs in optoelectronics, sensor development and surface engineering. The centre houses major facilities in ion implantation, vacuum processing silicon and compound semiconductor device processing and materials analysis, including optical techniques, electron microscopy, ion beam analysis, electrical measurements and mechanical testing.

Successful applicants will be required to undertake research in either semiconductor processing or non-semiconductor materials areas of the Centre's research.

Applicants should possess PhD in engineering or science disciplines with a background in experimental solid state research. Experience in semiconductor processing or surface modification and characterization of non-semiconductors will be an advantage.

These positions are available unit 31st December, 1993.

For further information contact Dr. D.K. Sood, Director, MMTC, on 61-3-660 2840 (from overseas) or 03-660 2840 (Australia).

Position descriptions are available from Human Resources Management Group on 61-3-660 4600 (from overseas) or 03-660 4600 (Australia). Applications, in writing and quoting Ref. No. 184-13-AS (semiconductor processing) or 184-12-AS (non-semiconductor materials), should be addressed to Senior Appointments Officer by Friday 27th Sept, 1991.

Equal opportunity is university policy  
Royal Melbourne Institute of Technology Ltd.  
GPO Box 2476V, Melbourne, Vic. 3001 E21b

**DIRECTOR-SUPERCONDUCTIVITY CENTERS  
Purdue University**

The Schools of Engineering and School of Science at Purdue University invite applicants to fill a vacancy for the directorship of the Superconductivity Centers: The director position is a tenured position in one or more of the participating disciplines: chemical engineering, chemistry, electrical engineering, materials engineering, or physics. Applicants must have an earned doctorate degree, be recognized as a leader in aspects of superconductivity, and have the qualifications to hold a senior faculty position.

Purdue University has an active superconductivity research effort involving faculty from both science and engineering. This activity also involves cooperative programs with five other midwest universities. The management and coordination of this multidisciplinary, multi-university activity is the responsibility of the Director of the Superconductivity Centers. Special resources for this activity include a Materials Preparation Facility and an Electrical and Magnetic Characterization Facility. Other support facilities for general materials research are also available for these activities.

The successful candidate will be expected to manage the Center activities, to establish a strong research program, and to become involved with the usual academic programs. The position is available and is expected to be filled during the 1991-92 academic year. All interested persons should submit an application prior to **November 1, 1991** for full consideration. The search will continue until the position is filled.

Resumes and names of three references should be sent to:

Superconductivity Director Search Committee  
School of Materials Engineering  
MSEE Bldg.  
Purdue University  
West Lafayette, IN 47907

*Purdue University is an Equal Opportunity/Affirmative Action Employer.*

**Advertising Contact:**

Mary E. Kaufold  
MRS BULLETIN  
Materials Research Society  
9800 McKnight Road  
Pittsburgh, PA 15237  
(412) 367-3036  
Fax (412) 367-4373