

Positions Available**RESEARCH SCIENTIST**

(Non-Tenure-Track)

**Facility for High Resolution Electron Microscopy
Arizona State University**

Applications for the above position to conduct research using transmission electron microscopy in the National Facility for High Resolution Electron Microscopy at ASU are invited. The successful candidate will coordinate the User Program of the Facility, assist the research of scientists from outside ASU and conduct research in collaboration with other academic professionals and faculty in various departments at ASU. PhD in physics with at least four years experience with TEM microanalytical techniques including high-spatial-resolution field-emission x-ray microanalysis, electron energy loss spectroscopy, convergent beam electron diffraction and TEM cathodoluminescence required.

Salary will be \$42,818 per year/FY.

Closing date December 15, 1991.

Send letter of application, resume and the names and addresses of three referees to: Chair, Research Scientist Search Committee, Center for Solid State Science, Arizona State University, Tempe, AZ 85287-1704. Applications must be received by December 15. Proof of authorization to work in the U.S. is required if hired.

ASU is an affirmative action equal opportunity employer.

CHAIR
**DEPARTMENT OF MATERIALS SCIENCE
AND ENGINEERING**
University of Alabama at Birmingham

Applications and nominations are invited for the position of Chair of the UAB Department of Materials Science and Engineering. UAB is one of three autonomous institutions in the University of Alabama System. The department consists of eight full-time faculty members, approximately 20 junior-senior undergraduates, and 25 doctoral degree candidates. The faculty currently direct sponsored research programs in excess of \$1M/year. The department offers BS, MS, and PhD degree programs in materials engineering. A PhD degree in materials science is also offered in collaboration with other universities in the University of Alabama System. The Chair will be expected to serve as the UAB Campus Director of the Materials Science PhD program.

Candidates for the position should have an earned doctorate in materials science, materials engineering, or a related field, and have a record of successful teaching and scholarship. The candidate should demonstrate the leadership qualities necessary to enhance the current growth and quality of the program, and provide interactions with related disciplines. The department is seeking the appropriate leadership to help it continue to advance toward its goal of national recognition as a leader in materials research and education. Position available to all qualified U.S. citizens and resident aliens. Applications should include a resume that contains a description of current research, and a list of future research goals. Applications and nominations will be accepted until the position is filled. Please respond to:

Dr. Martin McCutcheon
 Chairman, Materials Science and
 Engineering Search Committee
 Department of Biomedical Engineering
 University of Alabama at Birmingham
 UAB Station
 Birmingham, Alabama 35294
 Telephone: 205-934-8420

*UAB is an equal opportunity, affirmative action employer.***RESEARCH ASSOCIATE IN PHYSICAL METALLURGY**

Research Associate in Physical Metallurgy position available at a leading university to undertake experimental research on fracture (crack growth) processes. Duties include: Initiate and perform experimental research on fracture processes in metals and metal ceramic systems and crack tip plasticity in single and bicrystals, in coordination with a primarily theoretical group addressing fracture mechanics and micromechanisms, including chemical and physical aspects of interfacial failure. Help and advise graduate students in related experimental research. Configure, install and manage the operation of servocontrolled hydraulic universal testing machine, helping students and other researchers with its use. Develop an advanced laboratory for research on fracture phenomena.

Qualifications: PhD in physical metallurgy or related field, and a minimum of two years postdoctoral research on fracture (crack growth) phenomena, are required. The candidate must evidence significant expertise, by published work, on fundamentals of fracture mechanics and physical metallurgy, and on experimentation involving preparation of single and bi-crystal specimens including iron-silicon and metal/ceramic bonding, heat treatment, computer controlled mechanical and crack growth testing including hydrogen-assisted and stress corrosion cracking, microstructure characterization, electron microscopy, Auger surface analysis, dislocation etching, and optical analysis of strain fields. Applicant should be prepared to make a multi-year commitment to the position. Salary: \$40,000 per annum.

Interested applicants should send 2 resumes and refer to: Job Order #1876, P.O. Box 8968, Boston, MA 02114.

An equal opportunity, affirmative action employer.

DIRECTOR
New Product Innovation

A leading worldwide company engaged in the discovery, development, manufacture and marketing of pharmaceutical and health care products is seeking an individual to conduct analyses of new product marketing and business development requests, perform technology searches and reviews and conduct fundamental research. He/she will identify and manage the new product technology programs and provide overall product development leadership and technical contributions.

Our client is seeking an outstanding research scientist and manager. The compensation is flexible and should be attractive to individuals currently earning above \$75,000.

The ideal candidate will have a minimum of 10 to 15 years of research and development experience. Broad industrial scientific/technology product background is preferred; however, non-industrial environment acceptable if it includes a heavy industry component.

Industry experience with successful company(s) in medical device and wound care products; involved in clinical testing, claims and new drug application (NDA) programs; products include adhesives, plastics, foams and fibers.

Technical bachelor's degree and PhD in materials science, chemistry, and/or engineering, i.e., mechanical. Materials science emphasis in polymers.

Send confidential resume and salary requirements to: Michael S. Dunford, Inc., 478 Pennsylvania Avenue, Glen Ellyn, IL 60137.

CLASSIFIED

Positions Available

RESEARCH-FACULTY POSITION

The Laboratory for Nanostructured Materials Research of the Department of Materials Science and Engineering at Rutgers University invites applications for a non-tenure-track faculty position. The candidate will be responsible for developing experimental techniques for characterization of nanostructured materials using electron-optical techniques. Applicants must hold a PhD degree in physics or related field, and have at least 2 years postdoctoral research experience. Expertise is required in both theoretical and experimental aspects of high-resolution transmission electron microscopy and associated techniques including reflection electron microscopy (REM and RHEED), convergent beam electron diffraction and analytical microscopy (EDS and EELS). The candidate must also have strong experience in atomic-level structure characterization of surfaces and interfaces in electronic materials, thin films and metal-oxide composites using electron-optical techniques, as well as some expertise in the processing of nanostructured materials. Publications documenting experience is required.

Applications, with three reference letters should be submitted no later than **December 15, 1991** to Dr. F. Cosandey, Department of Materials Science and Engineering, College of Engineering, Rutgers University, Piscataway, NJ 08855.

Rutgers University is an Equal Opportunity, Affirmative Action Employer.

PHYSICIST/MATERIALS SCIENTIST

Experience in semiconductor crystal growth, preferably LPE or LPEE. BS or MS degree. Experience with slicing and polishing, and/or crystal characterization desirable. We are a small, hands-on company interested in exploiting proprietary technology for growth, needing a flexible person who can work within a close-knit group. Interested persons should send resume and names for professional references to:

Russell J. Ramsland Jr.
Executive Vice President
Microgravity Research Associates,
Inc.
P.O. Box 10505
Midland, TX 79705-7505

MATERIALS SCIENTIST

EMCORE Co. has an immediate opening in the Process Technology group to develop characterization and growth processes for thin film oxides and superconductors. The successful candidate will utilize state-of-the-art MOCVD and PE-MOCVD technology at a true frontier of materials science. The position offers the opportunity for substantial interaction with faculty at Rutgers, Stevens, and Princeton Universities. A PhD in materials science, electrical engineering, or solid state physics is required. Knowledge of thin film characterization and growth of electronic materials is desirable, but not required. A solid record of outstanding hands-on performance will be more strongly weighted than the particulars of the candidate's experience. Applicants may send their resumes to: Barbara Corcoran, EMCORE Corporation, 35 Elizabeth Ave., Somerset, NJ 08873.

EMCORE is an Affirmative Action/
Equal Opportunity Employer

FACULTY POSITIONS University of California, Los Angeles

The Department of Materials Science and Engineering at the University of California, Los Angeles, invites applications for two faculty positions in the following areas of materials science and engineering:

Advanced ceramics and ceramic processing,
Composite materials,
Electronic materials,
Theoretical materials science.

Candidates for tenure-track positions must have demonstrated outstanding originality, ability, and breadth through graduate work or postdoctoral research. Senior-level appointments will also be considered for individuals with an exceptional record of accomplishment. Qualified minority and female candidates are encouraged to apply. Please send curriculum vitae with a list of publications, names of three references and information on research and career interest to:

The Faculty Search Committee
Department of Materials Science
and Engineering
5731 Boelter Hall
University of California, Los Angeles
Los Angeles, CA 90024-1595

UCLA is an Equal Opportunity/
Affirmative Action Employer.

TWO FACULTY POSITIONS IN MATERIALS ENGINEERING

at

DREXEL UNIVERSITY In the Areas of Polymers and Mechanical Behavior

The Department of Materials Engineering at Drexel University is seeking applications to fill two tenure-track positions at the assistant professor level in the areas of polymers and mechanical behavior of isotropic and composite materials. Commitment to excellence in teaching is essential and the applicants will be expected to teach at the undergraduate and graduate levels, as well as develop strong research programs. Areas of research in the department emphasize materials processing, including physical and mechanical metallurgy, biomaterials, composites, powder metallurgy, polymers and ceramics. 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 **January 15, 1992**, to: Prof. Michael J. Koczak, Department of Materials Engineering, Drexel University, Philadelphia, PA 19104 (215-895-2328).

Drexel University is an equal opportunity, affirmative action employer.

UNIVERSITY OF CALIFORNIA

A number of temporary positions (research engineers, postdoctoral scholars, lecturers, visiting faculty) may be available in the following areas: materials science, ceramics, composite materials, metallurgy. PhD or equivalent experience. Send resume to: C.N.J. Wagner, Acting Chair, Department of Materials Science and Engineering, 5731 Boelter Hall, University of California, Los Angeles, CA 90024-1595.

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

CLASSIFIED

Positions Available

DEAN

School of Ceramic Engineering and Sciences

The New York State College of Ceramics at Alfred University announces a search for a Dean of its School of Ceramic Engineering and Sciences. The School, a companion to the College's School of Art and Design, currently has 25 faculty and approximately 400 undergraduate and 80 graduate students enrolled in programs leading to BS and MS degrees in Ceramic Engineering, Ceramic Engineering Science, Glass Engineering Science, and the PhD in Ceramics.

The new Dean will provide academic leadership to guide the School into the 21st century. He or she will report to Dr JW McCauley, the Dean and Chief Administrative Officer of the New York State College of Ceramics. The successful candidate will have academic credentials appropriate to a tenurable full professor. Previous academic administrative experience is highly desirable.

The College, a statutory public sector unit of the State University of New York, is located at Alfred University, a private institution of 2,500 students, situated in a pleasant rural setting in Western New York, 70 miles south of Rochester.

Expressions of interest, nominations, or application packages should be addressed to:

Dr Richard M Spriggs
JF McMahon Professor of Ceramic Engineering
Chair, Dean's Search Committee
New York State College of Ceramics at Alfred University
Alfred, NY 14802 USA
607-871-2486

Review of applications will begin December 1, 1991, and will continue until the position is filled. We hope to have the new Dean in place for the 1992/93 academic year.

The New York State College of Ceramics is an Affirmative Action, Equal Opportunity Employer. Women and minorities are encouraged to apply.

Positions Wanted

Experimental solid state physicist, PhD. Experience: multilayers, high-Tc superconductors, thin films; structural, electronic, and elastic properties. Technical background: thin film deposition, XRD, SAW, XPS, SAM, STM, resistivity. I seek a position in basic/applied research in materials, preferably thin films. Reply to Box No. 11-5, c/o MRS Bulletin.

Seeking position in industry or academia in the area of thin films, coating. 16 years hands-on experience in research, development and implementation of new methods in manufacturing. Technical skills: physical vapor deposition techniques, including evaporation, sputtering and ion-assisted film growth; ion and electron treatment. 15 papers and 4 patents. Reply to Box No. 11-7, 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

1992 MRS Bulletin
Editorial Calendar and
Advertising Rates...

Call Mary E. Kaufold
at (412) 367-3036 today!

POSTERMINARIES

Slings and Arrows and Sticks and Stones - Technophile Style

Is it ever amusing to be insulted? Have you ever known if an apparent brickbat was intended as an insult or compliment? Do you encounter this dilemma more often with technical colleagues than lay people?

In response to comparatively overwhelming demand since the appearance in January of 1988 of our POSTERMINARIES on the "Technophile Telegraph," we list some more examples of the vernacular of lab chatter applied to human (as distinct from scientific) pursuits. Of course the supply of examples is asymptotically infinite, so we have limited our list to a portion of the two-word alliterative subset. Interested readers may let the *MRS Bulletin* know which sound insulting, flattering, or neutral and may send some examples of their own.

Imagine being told that one (or several) of the following attributes can be applied to you:

Martensitic Mentality
Inertial Indecisiveness
Heat-and-Beat Bias*
Tangential Temperament
Insulated Indifference
Planetary Personality
Reactive Rhetoric
Axiomatic Attitude
Nebulous Notions
Amorphous Approach
Concrete Character
Precipitating Posture
Sagittal Stature
Ternary Talents
Orthogonal Optimism
Dilute Disposition
Stoichiometric Simplicity

*Not strictly a member of this set, but forced by entropic exigencies.

E.N. KAUFMANN