

Positions Available

DEAN

**G.W.C. Whiting School of Engineering
The Johns Hopkins University
Baltimore, Maryland**

The Johns Hopkins University is seeking applications and nominations for the position of Dean of the G.W.C. Whiting School of Engineering. The school has a full-time faculty of 90, an undergraduate student population of 760, a graduate student population of 385, and a large part-time Masters degree program with 285 part-time faculty and 2,500 part-time students. The School covers a wide range of fields and specialties in the following departments as well as in several interdepartmental degree programs:

- Biomedical engineering,
- Chemical engineering,
- Civil engineering,
- Computer science,
- Electrical & computer engineering,
- Geography & environmental engineering,
- Materials science & engineering,
- Mathematical sciences, and
- Mechanical engineering.

The Dean has responsibility for and authority over the school's programs and budget within the context of a highly decentralized university. The university seeks an individual of distinguished accomplishment to work with the faculty and the university in leading a School with a tradition of excellence in research, teaching, and service. Candidates should have demonstrated leadership skills in administration, fund raising and strategic planning as well as the ability to work constructively and creatively in collaborative relationships with the School of Arts and Sciences, School of Medicine, and the Applied Physics Laboratory.

Nominations and applications should be sent to:

Dr. Joseph Cooper, Provost
Chair, Search Committee, Eng'g.
The Johns Hopkins University
34th and Charles Sts.
Garland Hall 265
Baltimore, MD 21218

The Search Committee will begin reviewing nominations and applications on November 15, 1991. The university expects to fill this position before July 1992.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

**CERAMICS POSITIONS
University of New Mexico**

The UNM/NSF Center for Micro-Engineered Ceramics (CMEC) is seeking to fill two tenure-track faculty positions and a number of postdoctoral associate and graduate student research and teaching positions. CMEC is an interdisciplinary research facility that promotes collaborative research in ceramics between UNM, New Mexico Tech, Sandia and Los Alamos National Laboratories, and approximately 15 industrial partners. The center utilizes the strengths of all of the participants to conduct research into the synthesis and processing of ceramics of industrial significance.

Tenure Track Faculty - Mechanical Engineering. Applicants should have an earned PhD in either one of the fields of materials science (ceramics preferred) with an interest in one or more of the traditional areas of mechanical engineering, or in mechanical engineering with an interest in materials science. In either case, the successful candidate must teach and develop materials science courses for mechanical engineering students and develop a strong research program in materials science. Candidates for the rank of Assistant Professor are strongly encouraged to apply. Exceptionally qualified candidates with prior academic and/or industrial experience will be considered for a more senior position. Send resume, names of four references, reprints of representative publications, and a statement of research plans and teaching philosophy to: Prof. Martin W. Weiser, Chairperson Materials Search Committee, Mechanical Engineering Department, University of New Mexico, Albuquerque, NM 87131. Applications will be accepted until the position is filled. However, they should be submitted before January 10, 1992 for best consideration.

Tenure Track Faculty - Chemical and Nuclear Engineering. Applicants should have an earned PhD in chemical engineering, materials science, ceramic engineering, or a related area. It is anticipated that the new faculty member will establish a strong research program in materials and will easily integrate into our ongoing collaborations with CMEC. The applicant should be able to teach classes in chemical engineering. A strong preference exists for U.S. citizens and permanent residents to allow interaction with the National Laboratories. Exceptionally qualified candidates with prior academic and/or industrial experience can be considered for a more senior position. Send resume, names of four references, reprints of representative publications and a statement of research plans to: Natalie Olague, Chairperson, Chemical Engineering Search Committee, Chemical & Nuclear Engineering Department, University of New Mexico, Albuquerque, NM 87131-1341. Applications will be accepted until the position is filled. Applications should be submitted before January 10, 1992 for best consideration.

Postdoctoral Associates. A number of postdoctoral research associate positions are available for recent PhDs in various areas of ceramics synthesis and processing. The areas of expertise include but are not limited to: high-vacuum vapor deposition techniques; aerosol powder generation; synthetic inorganic/organometallic chemistry; sol-gel processing; characterization techniques such as TEM, NMR, and FTIR; and colloidal processing. Send resume, a description of your expertise, names of three references, and copies of representative publications to: Postdoctoral Associate Coordinator, UNM/NSF Center for Micro-Engineered Ceramics, University of New Mexico, Albuquerque, NM 87131.

Graduate Students. A large number of research and teaching assistantships are available through CMEC and the affiliated academic departments. Both Masters and Doctoral students are encouraged to apply for admission to one of the affiliated academic departments. Requests for further information and applications should be addressed to the graduate adviser of the department of Chemistry, Chemical Engineering, Mechanical Engineering, Physics, or Geology.

New Mexico has a rich and varied culture and representatives of all minority groups are encouraged to apply.

The University of New Mexico is an equal opportunity/affirmative action employer.

**NATIONAL HIGH MAGNETIC FIELD LABORATORY
Florida State University**

Materials Scientist Faculty - 12-month scholar scientist position with courtesy appointment in an appropriate department is available for applicants interested in the development and characterization of new materials critical to the development of the next generation of high field resistive and superconducting magnets. Strong interest in new materials as well as the physics and engineering of high field magnets is expected. This position requires a doctoral or master's degree in materials science or related field of specialization with a demonstrated record of research and development in conducting and superconducting materials. Deadline for applications: January 2, 1992

Send applications to: Dr. Jack Crow, Director, National High Magnetic Field, Laboratory-159A, Florida State University, Tallahassee, FL 32306.

Florida State University is an equal opportunity/affirmative action employer.

Positions Available

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.

RESEARCH ASSOCIATE

The National Renewable Energy Laboratory (NREL), formerly Solar Energy Research Institute, located in Golden, CO, seeks a Research Associate to identify, investigate and analyze electronic and structural properties of impurities and defects in III-V, II-VI, I-VII, and Si-based semi-conductors, such as Si-GaAs, copper chloride (CuCl) and zinc selenide (ZnSe), in order to improve efficiency and stability, and/or modify the performance of existing semiconductors using first-principles pseudopotentials and quasi-particle analysis. Prepare papers for publication in scientific periodicals. Requires PhD in theoretical solid-state physics: one year research in the theory of defects and impurities in solar cell semiconductors using first-principles pseudopotentials and quasi-particle analysis. \$42,000/year; 8:00 a.m.-5:00 p.m., M-F. Respond by resume no later than **January 15, 1992**, to: Colorado Department of Labor & Employment, Division of Employment & Training, 600 Grant St., Suite 900, Denver, CO 80203, ATTN: James Shimada, and refer to Job Order No. CO 3773877.

EOE

MATERIALS PROCESSING FACULTY POSITION
at the University of California, Irvine

Applications are being accepted for an anticipated faculty position at an assistant professor level in chemical and biochemical engineering for July 1992. Outstanding individuals with a strong commitment to research and teaching excellence are encouraged to apply. Applicants should have a PhD degree in chemical engineering or related field and the potential to lead a high-quality and well-funded research program in materials processing, including polymers, ceramics, composites, biomaterials, and electronic, photonic and recording materials. This is a tenure-track position and the successful candidate is expected to be able to teach chemical engineering courses at all levels. The successful candidate has the unique opportunity and challenge to participate in building a new department in a research university and to interact with the active interdisciplinary Materials Science and Engineering Program within the School of Engineering.

A curriculum vitae, a brief description of proposed research activities, and at least four reference letters should be sent by **December 31, 1991** to: Dr. H.C. Lim, Professor & Chair, Biochemical Engineering Program, School of Engineering, University of California, Irvine, CA 92717.

The University of California, Irvine, is an Equal Opportunity/Affirmative Action Employer. The School of Engineering welcomes applications from qualified women and minority candidates.

RESEARCH POSITIONS
University of Missouri-Rolla

Applications are sought for openings that are anticipated in the next six months for postdoctoral fellows, research assistant professors, and research engineers/aides. Applicants should possess a PhD degree in materials science/engineering or related disciplines such as physics, chemistry, ceramic, civil, metallurgical, or chemical engineering. Preference will be given to persons with relevant materials research experience. Applicants should send their current resume and a list of at least three references to:

Director
Graduate Center for
Materials Research
University of Missouri-Rolla
Rolla, Missouri 65401 (USA)

*UMR is an Equal Opportunity/
Affirmative Action Employer*

FACULTY POSITION
Materials Science & Engineering
University of Utah

Department of Materials Science & Engineering at the University of Utah is accepting applications for a tenure-track faculty position at the Assistant Professor level. The candidate must have a PhD degree in a materials-related field with primary interest in the area of ceramics. Preferred areas of expertise include novel processing of ceramics, e.g., sol-gel, thin films, electronic ceramics with emphasis on materials synthesis and structure-property relationships, materials theory and modeling. Successful candidate will be expected to teach at both the undergraduate and graduate levels, and to develop an independent research program. Women and minority candidates are encouraged to apply. The position is available and is expected to be filled before Autumn 1992. Deadline is one month after the appearance of this notice or until filled. To apply, send a complete resume with a list of three references to:

Prof. Richard H. Boyd, Chairman
Department of Materials Science & Engineering, 304 EMRO
University of Utah
Salt Lake City, Utah 84112

University is an Equal Opportunity Affirmative Action Employer.

ASSISTANT RESEARCH ENGINEER

Req. PhD in materials science. Knowledge of electric ceramics, advanced composites, fracture mechanics, solid mechanics & numerical modeling. Experience with ABAQUS numerical package is essential. Skillful in mechanical testing, electrical measurements, SEM and interference microscopy. Develop constitutive laws for smart materials & study their breakdown & failure behavior. Evaluate fracture toughness and microstructure of MMC, CMC and IMCs. Develop coatings for advanced composites. Supervise graduate students & development engineers. Proficient in operating the mechanical testing systems & high temperature & high voltage equipments. Knowledge in optical & scanning electron microscopes. Must be familiar with large-scale finite element analysis procedures. Must possess a clear record of accomplishments in the mechanical behaviors of advanced composites. \$3,758.00 per month. Job site/intr. Santa Barbara, CA. Send ad & resume to: Job #CP 13383, P.O. Box 9560, Sacramento, CA 95823-0560 no later than **January 20, 1992**.

Positions Available

FACULTY POSITION

Arizona State University

Department of Chemical, Bio and Materials Engineering

Arizona State University, Department of Chemical, Bio and Materials Engineering is seeking applicants for a tenure-track faculty position in the Materials Science and Engineering Program that we hope to be authorized to fill. The position has the rank of Assistant Professor, however, a position at higher rank may be offered to an experienced candidate with a strong record. Applicants holding a PhD degree in materials science and engineering, or a closely related discipline are encouraged to apply and specialists in any of the traditional areas of materials will be considered. However, preference will be given to candidates with a background and interest in materials processing, composite materials, or mechanical properties.

The successful candidate will be expected to develop and externally funded independent research program and to participate actively in program development at both the undergraduate and graduate levels. The ability to develop and teach specialized courses as well as courses in fundamental areas such as mechanical behavior, thermodynamics, materials characterization, and materials processing will enhance the applicant's position.

Applications must be received by **February 1, 1992**, or the first of each succeeding month until the position is filled. Late arriving applications will be considered only if the position remains unfilled. Candidates should provide a current vitae, a summary of research and teaching interests, and a list of three references to: Dr. Lester E. Hendrickson, Chair of the Materials Faculty Search Committee, Department of Chemical, Bio and Materials Engineering, Arizona State University, Tempe, Arizona 85287-6006.

Arizona State University enforces Affirmative Action hiring policies.

PROFESSOR AND CHAIR

**Department of Materials Sciences and Engineering
The Johns Hopkins University**

Applications and nominations are invited for the position of professor and chair of the Department of Materials Science and Engineering in the Whiting School of Engineering. The department consists of seven tenured and tenure-track faculty, three research professors, and six faculty with adjunct or joint appointments. About 25 undergraduate students are enrolled in an ABET accredited program, and more than 120 students are enrolled in masters and doctoral programs. The faculty currently direct sponsored research programs funded in excess of \$1M/year. Many faculty in the department are active in the Center for Nondestructive Evaluation.

Candidates for the position should have an earned doctorate in materials sciences, materials engineering, or related field and have a record of outstanding teaching and scholarship. Preference will be given to candidates specializing in physical properties of advanced materials including composites, ceramics, and electronic materials. Candidates must have demonstrated leadership qualities and must be qualified to serve as chair of the department.

Applications should include a resume describing current research and three references. Nominations of qualified women and minorities are especially encouraged. Please respond to:

Dr. Charles R. Westgate
Chair of MS&E Search Committee
Electrical and Computer Engineering
Barton 105
Johns Hopkins University
Baltimore, MD 21218
Telephone: (301) 338-7014
FAX: (301) 338-5566

The Johns Hopkins University is an equal opportunity, affirmative action employer.

RESEARCH SPECIALIST

**Surface Research with
UHV Electron Microscopy**

Applications are invited for an Assistant/Associate Research Specialist, continuing track position in the Department of Physics and Astronomy, Arizona State University, to provide advanced technical support for the UHV electron microscopes within the Facility for High Resolution Electron Microscopy, to assist with the maintenance, development and use of the UHV microscopes and auxiliary equipment, and to participate in related research projects. Applicants should have a BS, preferred MS, in physical science and several years experience with surface science techniques. Knowledge of electron microscopy and computer-based data acquisition is desirable. Applications and the names of three references should be addressed to: J.M. Cowley, Department of Physics and Astronomy, ASU, Tempe, AZ 85287-1504 by December 15, 1991 or the 15th of each month until position is filled. Appointment dependent on final budget approval.

ASU is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST

Conduct research to study epitaxial growth of semiconductor films and strained layer superlattices of III-V compounds. Investigate surface structures of metals and semiconductors. Characterize metal-semiconductor interfaces utilizing molecular beam epitaxy (MBE), reflection high-energy electron diffraction (RHEED), Auger electron spectroscopy (AES), low-energy electron diffraction (LEED), ultrathin film deposition, and ultrahigh vacuum (UHV). Generate research funding and write proposals for support of research. Oversee research progress of graduate students. Requires PhD in physics, plus one year in job offered or one year as research associate. \$28,000/hr. 40 hrs/wk. Apply at Texas Employment Commission, Houston, Texas, or send resume to Texas Employment Commission, Austin, Texas 78778, J.O. # 6521447.

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