

Positions Available

SCIENTIFIC STAFF POSITIONS

The Center for Functional Nano-materials (CFN) at Brookhaven National Laboratory (BNL) (<http://www.bnl.gov/cfn>) is pleased to announce new opportunities for scientific and technical employment beginning in the fall of 2007.

In selected cases, openings will be available in January 2007. The CFN is a science-based user facility funded by the US DOE Office of Basic Energy Sciences to provide state-of-the-art capabilities for the fabrication and study of nano-scale materials. The CFN will feature strong in-house scientific programs while offering broad access to its capabilities and collaboration through an active user program. The CFN seeks to impact the nation's energy security through world-class interdisciplinary research in three focus areas, including **Nano-catalysis** (Synthesis and characterization of in situ reactivity of nano-structured catalysts), **Electronic Nano-materials** (Fundamental excitations in low-D materials, especially heterogeneous nanostructures and strongly correlated systems), and **Biological and Soft Nano-materials** (Self-organization in soft and hybrid functional nano-systems). Corresponding state-of-the-art laboratory facilities are being developed in **Nano-patterning**, **Advanced Electron Microscopy**, **Proximal Probes**, **Theory and Computation**, **Ultra-fast Spectroscopy**, **Materials Synthesis**, and **Small Angle Scattering at the National Synchrotron Light Source**.

Full operations are to begin in April 2008. Outstanding individuals are sought in all of the laboratory facility and theme areas at levels ranging from group leader and senior scientist to junior scientist and post doc. A brief summary of selected job areas is given below. A complete list of openings and full details concerning applying for these positions may be found at <http://www.bnl.gov/cfn/jobs>.

Electro-catalysis/catalysis of in situ systems, including fuel cells, using surface science, electrochemistry, and synchrotron techniques

In situ electron microscopy of chemical reactions, oxide nano-particles, and other nano-structured objects

Spectroscopic STM of surface reactions/catalysis and nanostructured electronic nanomaterials

Real-time LEEM/PEEM of surface processes

Inorganic/materials chemistry, nano-particle synthesis

Synchrotron-based, soft-matter/biomaterials nanoscience

Ultra-fast laser spectroscopy

Nano-scale theory and computation

Organic/macromolecular chemistry of surfaces, supramolecular assemblies and hybrid nano-systems

Single-molecule optical methods for soft-matter/biomaterials

Experimental soft matter physics and biophysics

Plasma/vacuum processing technology and nano-fabrication

Focused ion beam microscopy and related analytical methods

Clean room engineer

Qualifications for these positions include a Ph.D. in the physical or life sciences, a strong record of technical achievement and the demonstrated ability to conduct creative, independent research. Successful candidates will also have excellent communication and interpersonal skills, as well as the ability to work in a team and interact effectively with a broad range of colleagues.

Interested candidates should respond to <http://www.bnl.gov/cfn/jobs>, select the scientific areas of interest, and respond by including a detailed CV, publications list, and the names of three references.

BNL is an equal opportunity employer committed to building and maintaining a diverse workforce. BNL is managed by Brookhaven Science Associates for the U.S. Department of Energy.

BROOKHAVEN
NATIONAL LABORATORY
a passion for discovery.

www.bnl.gov



University of
**Central
Florida**

DIRECTOR POSITION
Advanced Materials Processing and
Analysis Center
University of Central Florida
<http://www.ampac.ucf.edu/>

The University of Central Florida, a major metropolitan research university located in Orlando, FL, with over 45,000 students, is searching for a Director of its Advanced Materials Processing and Analysis Center (AMPAC). AMPAC conducts leading-edge interdisciplinary education and research in advanced materials, including miniaturization, nano-materials fabrication, micro- and nano-devices, and acousto-electronics, for applications that include energy, microelectronics, MEMS, nanotechnology, and bioengineering. In addition to nine tenured/tenure-earning faculty and 17 affiliate faculty, AMPAC has five full-time staff who support two major multi-user facilities: the 7,000 ft² Materials Characterization Facility (MCF) and the 2,600 ft² class 100/1000 cleanroom Advanced Microfabrication Facility (AMF). These facilities, staff, and faculty are foundational elements of the associated interdisciplinary Materials Science and Engineering degree program that has a current enrollment of over 65 graduate students and offers both PhD and MS degrees.

UCF seeks candidates with proven track records of research accomplishments in materials science and engineering. The ideal candidate will have a PhD degree or equivalent from an accredited institution in the field of materials science and engineering or an allied discipline; must be eligible for appointment with tenure at the full professor rank; possess exceptional vision, commitment, and leadership skills; and be able to enthusiastically coordinate industry, faculty, and administration efforts in growing the research programs of AMPAC.

Review of candidates will begin on **October 16, 2006**, but candidates are welcome to apply after this date. Electronically submit curriculum vitae, a summary of research accomplishments, vision for the Center, and the names and contact information of three references to: Chair of the Search Committee, AMPAC Director Search, University of Central Florida, 1679 Clearlake Road, Cocoa, FL 32922-5703; ampac_dir@fsec.ucf.edu. As a member of the Florida State University System, all application materials and selection procedures are available for public review.

The University of Central Florida is an affirmative action/equal opportunity employer.

RESEARCH FACULTY POSITIONS

Applied Sciences

Research Center for Applied Sciences

Academia Sinica

The Research Center for Applied Sciences (RCAS), Academia Sinica, Taiwan (<http://www.rcas.sinica.edu.tw>) expects to have several openings for postdoctoral fellows and research faculties at all levels (from assistant professor to distinguished professor) in the following areas of interest:

1. Advanced computation and modeling
2. Nano-biomedical science
3. Optoelectronics and advanced materials
4. Mechanics and engineering science

A PhD degree in physics, mathematics, chemistry, or engineering is required. Level of appointment depends on qualifications and experience, and salary is competitive. For exceptional candidates, a special fellowship may be awarded. Interested candidates should arrange to have three letters of reference and CV sent via e-mail to: joycelin@gate.sinica.edu.tw or via post mail to:

Joyce Lin, Assistant to Director
Research Center for Applied Sciences
Academia Sinica
128 Sec. 2, Academia Road
Nankang, Taipei 115
Taiwan, R.O.C.

Positions Available

Cornell University, School of Chemical & Biomolecular Engineering Faculty Opening:

Located in Ithaca, N.Y., Cornell University is a bold, innovative, inclusive and dynamic teaching and research university where staff, faculty, and students alike are challenged to make an enduring contribution to the betterment of humanity.

Cornell University invites applications for a tenure-track or tenured position in the School of Chemical and Biomolecular Engineering at any rank (Assistant, Associate, or Full Professor) consistent with the candidate's experience and achievements. The successful candidate must demonstrate the ability to build a strong research program, and to effectively teach and mentor undergraduate and graduate students. All research areas will be considered with some preference given to those in the broad areas of biomolecular engineering, electronic materials synthesis and characterization, and energy engineering.

The successful candidate can expect to benefit from associations with Cornell's interdisciplinary research centers, national facilities and resources in nanobiotechnology, biotechnology, nanoscale systems, materials research, nanofabrication, a High Energy Synchrotron Source and supercomputing facilities (www.engineering.cornell.edu/research/research-centers). Cornell University provides an environment that promotes collaboration with other faculty, including those in other departments and colleges as exemplified by Cornell's initiatives in Life Sciences, Sustainable Development, and Advanced Materials.

The School of Chemical and Biomolecular Engineering, and the College of Engineering, are committed to increasing the diversity of the faculty and we strongly encourage people from under-represented minority backgrounds to apply. Cornell is committed to being a supportive, family-oriented employer. Interested candidates can learn more about this position at: <http://www.cheme.cornell.edu/news>.



Cornell University

Cornell University is an Affirmative Action/ Equal Opportunity Employer and Educator.

<http://chronicle.com/jobs/profiles/2377.htm>

**ENDOWED CHAIR IN CERAMIC ENGINEERING
Department of Metallurgical and Materials Engineering
Colorado School of Mines**

The Colorado School of Mines invites applications for an anticipated Endowed Chair position in Ceramic Engineering. The selected applicant will be the H.F. Coors Distinguished Professor at the Colorado School of Mines and is expected to develop teaching and research programs in advanced ceramics.

For a complete job announcement, more information about the position and the university, and instructions on how to apply, please visit our website at www.is.mines.edu/hr/Faculty_Jobs.shtm

CSM is an EEO/AA employer and is committed to enhancing the diversity of its campus community. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.



University of California
LAWRENCE LIVERMORE NATIONAL LABORATORY
Science in the National Interest

LAWRENCE POSTDOCTORAL FELLOWSHIP

The Lawrence Livermore National Laboratory (LLNL) has openings available under its Lawrence Fellowship Program. This is a highly desirable, prestigious postdoctoral position with ample resources and freedom to conduct cutting-edge research in a field of the candidate's choice. The duration of the Fellowship is up to three years. Typically two to four openings are available each year. Fellowships are awarded only to candidates with exceptional talent, credentials and a track record of research accomplishments.

Candidates will do original research in one or more aspects of science relevant to the mission and goals of LLNL which include: Physics, Applied Mathematics, Computer Science, Chemistry, Material Science, Engineering, Environmental Science, Atmospheric Science, Geology, Energy, Lasers and Biology. Successful candidates may participate in experimental or theoretical work at LLNL, and will have access to LLNL's extensive computing facilities, specialized laboratory facilities and field equipment. A senior scientist will serve as a mentor to each of the Fellows. The candidates will receive full management and administrative support. The salary is \$7,933/mo.

Please refer to our web page <http://fellowship.llnl.gov> for eligibility requirements and instructions on how to apply. When applying and prompted, please mention where you saw this ad. The deadline for application is November 1, 2006. LLNL is operated by the University of California for the National Nuclear Security Administration/ Department of Energy. We are an Equal Opportunity Employer with a commitment to workforce diversity.

Lawrence Livermore National Laboratory

<http://fellowship.llnl.gov>



**Tenure Track Assistant Professor(s) in
Advanced Materials for Energy**

The Department of Materials Science and Engineering and the Materials Research Institute at The Pennsylvania State University are seeking to hire two outstanding tenure track assistant professors specializing in the science of advanced materials for energy applications. The Department of Materials Science and Engineering, which has 30 full time faculty members, approximately 170 graduate and 150 undergraduate students, is consistently ranked in the top 10 nationwide. We are searching for candidates active in materials synthesis, characterization, or modeling related to energy applications such as energy storage (batteries, hydrogen), solar energy, fuel cells, dielectrics, thermoelectrics, or other areas of relevance. Successful candidates will be expected to become leaders in energy-related materials and develop innovative, extramurally funded research programs. Teaching duties are expected to include undergraduate/graduate classes in related areas. With an emphasis on building diversity in our workforce, we particularly encourage female and minority applicants. Interested candidates should send a curriculum vitae, a summary of research and teaching interests, and the names of three references to Prof. Zi-Kui Liu, c/o Ms. Kim Sterndale, Administrative Assistant, Department of Materials Science and Engineering, The Pennsylvania State University, 121 Steidle Building, University Park, PA 16802. E-mail submissions can be sent to sterndale@matse.psu.edu. Review of applications will begin October 15, 2006, and continue until the positions are filled.

Penn State is committed to affirmative action, equal opportunity and diversity of its workforce.

PENN STATE Making Life Better

Positions Available

NANOLITHOGRAPHY ENGINEER
Princeton Institute for the Science and
Technology of Materials
Princeton University

We are looking for a Nanolithography Engineer for the Princeton Institute for the Science and Technology of Materials (PRISM). PRISM is a multidisciplinary research center at Princeton University in soft and hard materials science. The Nanolithography Engineer will assume responsibilities for a new Raith eLINE electron beam lithography system, and of all other existing patterning equipment, including two Suss mask aligners, a Heidelberg DWL66 laser pattern generator, a near-field holography setup, and a Nanonex nanoimprinter.

The candidate must have a PhD degree in Chemical/Electrical/Mechanical Engineering, Physics, Materials Science, or a related technical discipline, and a minimum of three years of research experience in electron beam lithography. Responsibilities include technical support of the tools, interfacing with vendors, mentoring and training of students, process development, writing internal documentation for tools and processes, and facilitating research projects. Commitment to instructing and helping students is essential. The person must be mechanically inclined, and be capable of solving demanding technical and research problems. Previous knowledge of semiconductor device packaging is welcome to support an upgrading initiative by the newly-founded NSF MIRTHE center.

Applicants should send their resume, list of publications, and the names and addresses of three academic or professional references as soon as possible to: Mrs. Kim Hegelbach, PRISM Manager, Princeton University, E-Quad, Olden Street, Princeton, NJ 08544. For information about applying to Princeton, please link to <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm>.

Princeton University is an affirmative action, equal opportunity employer. Women and minority candidates are encouraged to apply.

TENURE-TRACK ASSOCIATE PROFESSOR POSITION
Department of Future Industry-oriented
Basic Science and Materials
Toyota Technological Institute

The Department of Future Industry-oriented Basic Science and Materials, Graduate School, Toyota Technological Institute has an opening for a tenure-track faculty position. Candidates must have a PhD degree in physics, chemistry, materials, or related subject; a demonstrated ability for creative research; and evidence of effective teaching both at the graduate and undergraduate levels.

The position will be in the Quantum Interface Laboratory to work on the physics/chemistry/electronics of surface/interface of quantum structures, organic-inorganic interfaces in particular. Fundamental knowledge in electronic physics is a prerequisite. Preference will be given to candidates with experience in chemistry to design and prepare organic-inorganic interfaces, and perform measurements on their physical properties, opto-electronics in particular. The successful candidate is expected to start at the earliest convenience.

Applicants should send their curriculum vitae, list of publications, copies of five selected papers, a brief description of research activities and future plan for research and education (3 pages), and the names of two references with Tel/Fax and E-mail address to:

Mr. Hirotosugu Kurata, Administration Division
 Toyota Technological Institute
 2-12-1, Hisakata, Tempaku-ku, Nagoya, 468-8511 Japan

Applications are due **November 10, 2006**. For inquiries, please contact Prof. Takao Suzuki, Head of Search Committee by e-mail at Takao_Suzuki@toyota-ti.ac.jp. Further information can be found through our web site at http://www.toyota-ti.ac.jp/Jinji/2006_2_Prof_E.htm.

Materials Science and Engineering
Assistant/Associate/Full Professors

Stony Brook University's Department of Materials Science and Engineering in the College of Engineering and Applied Sciences is seeking applications for three tenure-track faculty positions at the Assistant, Associate, and Full Professor levels. The Department administers undergraduate programs in Engineering Science, Chemical and Molecular Engineering, as well as a graduate program in Materials Science and Engineering. **Required:** A Ph.D. in Materials Science or related fields. Experience in any of the following areas is highly preferred; Biomaterials, nanomaterials, electronic materials, crystal growth, catalysis, composite materials, energy-related materials, or other branches of materials processing and synthesis. In addition to pursuing excellence in undergraduate and graduate teaching, the ability to initiate both independent and collaborative research programs and interact with industry is of importance. Applications will be accepted until the position is filled.

Please send a copy of your curriculum vitae, a research plan (maximum three pages), a statement of teaching philosophy, at least three pertinent reprints, and names of at least three references to: Lynn Allopenna, Assistant to Chair, Department of Materials Science and Engineering, 314 Old Engineering, Stony Brook University Stony Brook, NY 11794-2275

Equal Opportunity/Affirmative Action Employer. Visit www.stonybrook.edu/cjo for complete job description and to apply online.



TU/e technische universiteit eindhoven

Full professor
Photonic Nano-materials

The department of Applied Physics of the Eindhoven University of Technology (TU/e) invites candidates to apply for this new chair in the group Photonics and Semiconductor Nanophysics. Candidates should have an excellent international reputation in this research area and a strong interest in multi-disciplinary research. Information on the department of Applied Physics and a chair profile can be found at <http://www.phys.tue.nl> and at <http://www.phys.tue.nl/psn>

The TU/e - a highly competitive university of technology - is located in Eindhoven in The Netherlands, in a European Technology Hotspot with high-tech companies such as Philips and ASM-Lithography and many start-ups.

Positions Available

Theory Facility Positions



Lawrence Berkeley National Laboratory (LBNL) would like to announce exciting opportunities available in the Theory of Nanostructured Materials Facility at the Molecular Foundry. Staff scientists in this facility will develop and apply novel concepts and predictive methods for theoretical and computational nanoscience in several diverse application areas, including nanoelectronics, energy-related science, nanomechanical systems, and new nanomaterials. Current and planned capabilities include the simulation of electronic structure, structural and mechanical properties, dynamical/finite-temperature behavior, and transport and spectroscopic properties of hard and soft nanoscale structures and assemblies. [<http://foundry.lbl.gov/facilities/theory.htm>]

The Molecular Foundry at LBNL is a national user facility for the design, synthesis, and characterization of materials with nanometer dimensions. One of five such nanoscale science research centers recently established by the U.S. Department of Energy, its charter defines two primary missions: a) conduct outstanding research across the breadth of nanoscience, and b) collaborate with scientists from around the world who visit to use its state-of-the-art instruments and techniques and to take advantage of the expertise of its staff to further their own nanoscience research efforts. [<http://foundry.lbl.gov>]

The Theory Facility is seeking highly accomplished and innovative individuals in the area of theoretical and computational nanoscience:

- Staff Scientist, job #018800
- Lead Scientist, job #019115
- Post Doc Fellow, job #018979

Particularly accomplished scientists who have also demonstrated successful management of a large group of researchers will be considered for "Lead Scientist" positions, with day-to-day operational and managerial responsibility.

Detailed position descriptions/application requirements are located at <http://foundry.lbl.gov>. Please reference "MRS Bulletin" as your source.

LBNL is an AA/EEO employer committed to a safe and diverse workforce.

FELLOWSHIPS

Princeton Center for Complex Materials Princeton University

The Princeton Center for Complex Materials (PCCM), a Materials Research Science and Engineering Center at Princeton University funded through the National Science Foundation, seeks highly-qualified applicants for its postdoctoral Fellows program.

PCCM Fellows will work with two or more PCCM Investigators on interdisciplinary research projects underway at the Center, including highly correlated electronic materials, guided self-assembly, and contacts in small structures. More information on PCCM's Interdisciplinary Research Groups, together with the names and contact details of PCCM investigators, may be found at <http://www.princeton.edu/~pccm>.

Fellows' salaries will be highly competitive and commensurate with experience; appointments are initially for one year. Potential applicants should initiate the application process by contacting the PCCM investigators with whom they wish to work, or the leader of the IRG covering the research area of interest. All applications must be submitted through a sponsoring PCCM investigator, and will consist of:

- 1) the applicant's CV and three selected p/reprints of prior research;
- 2) a one-page description of the proposed work, prepared by the applicant in consultation with the sponsoring PCCM investigators;
- 3) a joint support letter from the sponsoring PCCM investigators endorsing the research plan;
- 4) two external letters of recommendation.

Applications are considered on a rolling basis and thus may be submitted at any time. For information about applying to Princeton, please link to <http://web.princeton.edu/sites/dof/Applicantsinfo.htm>.

Princeton University is an affirmative action, equal opportunity employer. Women and minority candidates are encouraged to apply.

TENURE-TRACK FACULTY POSITION Department of Materials Science and Engineering Pohang University of Science and Technology (POSTECH) South Korea

The Department of Materials Science and Engineering (www.postech.ac.kr/mse) at POSTECH (www.postech.ac.kr) invites applications for a tenure-track position at the assistant or associate professor level in the area of materials for energy technology.

Applicants must have a doctoral degree in materials science and engineering or a related discipline with at least two years of work experience and an outstanding research record. The successful candidate must be able to teach undergraduate level courses in the areas of materials science and engineering, and should have a strong interest in developing new and innovative graduate courses in related areas. It is important for the applicant to demonstrate motivation and an ability to develop research programs in collaboration with other faculty members and serve the academic/research community.

Interested persons should apply by **November 30, 2006** with a curriculum vitae with a recent photograph, the names/addresses of three references, and a statement of research plans, teaching goals, and other supporting materials. Submission materials should be sent to:

Mr. Doo Han Moon, Administrative Assistant
Department of Materials Science and Engineering
Pohang University of Science and Technology (POSTECH)
San 31, Hyoja-Dong, Pohang, 790-784, Korea

Electronic submissions are preferred; E-mail to mse-postech@postech.ac.kr.



Sandia National Laboratories

POSTDOCTORAL APPOINTEE Interface Science of Materials

The Micro- and Interfacial Sciences Department at Sandia National Laboratories in Livermore, California, is seeking a postdoctoral researcher in the area of Interface Science of Materials. The appointee will conduct experimental studies using transmission electron microscopy to investigate how the structure, composition, and dynamics of interfaces are controlled at the atomic-scale. Particular areas of research interest include grain boundary structure and motion, defect/interface interactions, and solid-state phase transformations. This work will be done in close collaboration with ongoing materials theory and computation efforts.

Qualified candidates will possess a PhD degree in materials science, physics, chemistry, or a closely related discipline. Other requirements include a thorough experimental background in transmission electron microscopy applied to materials analysis; experience in imaging, diffraction, and spectroscopic methods; and a record of accomplishment in fundamental materials science, demonstrated by a distinguished record of publications. An experimental background in areas such as materials growth and synthesis, microfabrication, or other materials characterization methods; and strong computational skills, particularly with regards to laboratory programming and quantitative image and data analysis are also highly desired. The annual salary for this position is \$72,100.

If you are interested in this postdoctoral position, please apply ONLINE at www.sandia.gov/employment/career-opp. Click on "Current Jobs," select job reference #55812, and complete an ONLINE application. Be sure to include your current resume, a list of publications, a minimum of three references, and a brief description of your research interests.

Sandia is an Equal Opportunity/Affirmative Action Employer.

Positions Available

FACULTY POSITIONS

Department of Materials Science and Engineering
University of Florida

The Department of Materials Science and Engineering of the University of Florida invites applications for three tenure-track positions at the Assistant Professor rank. Candidates are sought with interests in biomaterials and materials for energy technologies, with expertise in, for example:

- Computational materials science, particularly modeling of biomaterials, or mesoscale modeling
- Advanced materials characterization, particularly TEM or LEAP
- Processing and device fabrication
- Materials, particularly metals, for bio-nano, medical, sensing, or energy applications

Exceptional candidates in other areas of materials research, or at Associate and Professor ranks, will also be considered. A doctoral degree in materials science and engineering or a related field is required, and postdoctoral experience is preferred.

The UF MSE Department has consistently ranked among the top ten in the nation for both graduate and undergraduate programs. It is also among the largest MSE departments in the nation with 30 faculty members, nearly 250 graduate students, over 150 undergraduates, and over \$18 million in annual research expenditures. Our faculty research activities are essential to the success of our program; as such, new members are expected to initiate and sustain strong sponsored research and graduate training programs.

The department provides integrated Materials Science and Engineering education devoted to biomaterials, ceramics, composites, electronic and optical materials, metals, and polymers. We anticipate that the successful applicant will continue the tradition of both developing and teaching courses at the undergraduate and graduate level.

The Department also houses the Major Analytical Instrumentation Center (MAIC), the UF-DOE High Temperature Electrochemistry Center (HiTEC), and the Florida Laboratory for Advanced Materials Engineering Simulation (FLAMES), a state-of-the-art HVOF facility. The MAIC houses many state-of-the-art characterizations instruments including a JEOL 2010F with Z-contrast, EELS, and EDS capabilities. UF offers unique research capabilities in that it is one of only three universities nationwide where all bio-nano disciplines—engineering, sciences, and medicine are located in close proximity on one campus. In addition, our faculty actively participate in the National High Magnetic Field Laboratory (NHMFL), the Particle Engineering Research Center (PERC), Evelyn L. and William F. McKnight Brain Institute, and the Biomedical Engineering Department.

The search committee will begin reviewing applications on **October 1, 2006**, and will continue to receive applications until the positions are filled. To apply please reference position numbers 0012759, 00008593, 00009568, and send curriculum vitae, statement of research and teaching interests, and contact information for three references to:

Chair of the Search Committee
Materials Science Faculty Search
Department of Materials Science and Engineering
Post Office Box 116400
University of Florida
Gainesville, Florida 32611-6400

In addition, PDF files of the application package should be e-mailed to Mr. Matthew Waltersat at mwalt@mse.ufl.edu. For additional information about the Department and University, please visit our Web site at <http://www.mse.ufl.edu>. According to Florida law, applications and meetings regarding applications are open to the public on request.

The University of Florida is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority group members.

CHEMIST
STAFF SCIENTIST/ENGINEER
Lawrence Berkeley
National Laboratory

Lawrence Berkeley National Laboratory (LBNL) is located in the San Francisco Bay Area on a 200-acre site in the hills above the University of California's Berkeley campus and is managed by the University. A leader in science and engineering research for more than 75 years, LBNL is the oldest of the U.S. Department of Energy's National Laboratories.

POSITION DESCRIPTION: LBNL is seeking an independent scientist with electrochemical expertise to engage in research programs aimed at the development of fuel-cell and battery systems for transportation applications. He/she will plan, organize, and conduct research on electrochemical systems, with emphasis on surface characterization and electrocatalytic behavior.

DUTIES: The candidate will conduct research aimed at the fundamental understanding of electrocatalysis including the analysis of multi-electron transfer reactions, development of novel electrocatalytic structures, and importance of high-energy intermediates. He/she will develop an understanding of the surface and film effects in both fuel cells and lithium and lithium-ion batteries using spectroscopic investigations to determine the relevant species and to substantiate mechanisms. It may also be necessary to help with the management of the LBNL fuel-cell program including presenting work at review meetings and developing annual operating plans.

QUALIFICATIONS: A high level of proficiency in electrocatalysis, fuel cells, electrochemistry, and surface-science techniques is required for this position. It will also be important to have strong expertise and experience in experimental characterization of fuel-cell and similar electrochemical systems using such techniques as FTIR, SERS, GC-MS, UV-VIS, chromatography, x-ray diffraction, and other *ex-situ* and *in-situ* advanced surface characterizations. A PhD degree in Electrochemical or Chemical Engineering or a related field is essential, and the candidate must have the ability to work as an independent researcher with a high level of scientific judgment, and to participate in collaborative efforts as a member of a large research team. Ten years of scientific research experience is preferred, as is familiarity with contemporary scientific issues in battery and fuel-cell science and technology. The candidate must have excellent organizational and communication skills, and the ability to write, plan, and organize proposals for funding and prepare effective materials for presentation at meetings and workshops.

NOTE: This is a full-time career appointment.

For fastest consideration, apply online at <http://jobs.lbl.gov>, select "Search Jobs", and enter **019280** in the keyword search field. Enter "MRS Bulletin" as your source. For more information about LBNL and its programs, visit www.lbl.gov.

LBNL is an Affirmative Action/Equal Opportunity Employer committed to the development of a diverse workforce.

SCIENTISTS AND ENGINEERS
NStructures, Inc.

NStructures, a nanotechnology startup focusing on solar photovoltaics in Silicon Valley, CA, invites applications for scientists and engineers with relevant experience at all levels (BS, MS, PhD) in the following fields: synthetic chemistry, thin films, process engineering, materials characterization, thin film device fabrication and characterization, and electron microscopy. Please send a resume and a list of references to careers@nstructures.com.

NStructures is an Equal Opportunity Employer

Positions Available

Corrosion Science and Process Engineering Section Manager

Position Description:

Manage a team of corrosion and material scientists, chemical engineers, and chemists conducting research to evaluate and predict long-term performance of engineered materials. Integrate the team research with investigations conducted by mechanical and geotechnical engineers, geochemists, hydrologists, and risk analysts to evaluate the performance of the engineered barrier system for the geologic disposal of high-level radioactive waste at Yucca Mountain, Nevada. Develop and promote new research programs within the U.S. Nuclear Regulatory Commission and with private industry clients that draw from the multi-disciplinary technical expertise of the Center for Nuclear Waste Regulatory Analyses.

The manager of the Corrosion Science and Process Engineering section, located in San Antonio, TX, will be responsible for managing a research and technical assistance project for the U.S. Nuclear Regulatory Commission's High Level Waste Repository Safety Program. In addition, the manager will support and expand research programs in the Geosciences and Engineering Division at Southwest Research Institute related to nuclear power plants, chemical process plants, and defense and aerospace materials.

Basic Qualifications:

Prospective candidates must have earned an M.S. or Ph.D. in metallurgy, materials science, materials engineering, corrosion science, corrosion engineering, chemical engineering, or related disciplines, and have at least ten years experience at the M.S. level and at least five years experience at the Ph.D. level. Prospective candidates should also have demonstrated an ability to successfully manage applied research programs, and have a sizable record of publications in peer-reviewed journals. A good understanding of modeling and experimentation involving all forms of metallic corrosion, materials characterization and stability, and spent nuclear fuel dissolution processes is needed.

Additional and/or Preferred Knowledge, Skills, and Abilities:

Experience with nickel-based and titanium alloys, stainless steels, and amorphous metal coatings is a plus. All candidates must have an excellent command of written and spoken English, be able to pass a conflict of interest assessment regarding any prior or current work for the U.S. Department of Energy's proposed high level waste repository at Yucca Mountain, and be able to obtain a U.S. security clearance.

**To be considered further for this position, please visit our web site
www.swri.org/hr and complete an on-line application form.**

**Southwest Research Institute
P.O. Drawer 28510
San Antonio, Texas 78228-0510**



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POSTDOCTORAL FELLOW/RESEARCH FELLOW— ELECTRON MICROSCOPY School of Engineering and Centre for Microscopy and Microanalysis (CMM) The University of Queensland

To play a key role in an established project which aims to develop characterisation techniques to understand and improve the complex structure and properties of segmented polyurethane nano-composites. Based around developing the electron microscopy evaluation of these exciting materials, the applicant will also have access to a range of other characterisation instruments including WAXD, SAXS, AFM, and other spectroscopic techniques.

Rolling Deadline: October 13, 2006; if not filled, then every week thereafter until search is closed. For qualifications/application information, please follow the web links on the UQ website at <http://www.uq.edu.au/staff/> (listed 20 July 06, Reference Number: 1274849).

FACULTY POSITION Mechanics, Materials, and Computing Civil and Environmental Engineering Carnegie Mellon University

Carnegie Mellon University's Department of Civil and Environmental Engineering invites applications for a tenure-track faculty position in the area of mechanics, materials, and computing. The opening is at the assistant professor level. However, exceptionally well-qualified applicants may also be considered at the associate professor level.

The successful candidate must have the ability to teach effectively at both the undergraduate and graduate levels within the Department and develop an active and significant research program. The Department is particularly interested in applicants with research focus on multi-scale mechanics of crystalline/granular materials, with particular emphasis on techniques for transferring relevant modeling information from small to large temporal and spatial scales. Candidates with expertise in Molecular Dynamics/Discrete Element modeling along with a demonstrated interest in the development of meso/macroscale models are also encouraged to apply.

The University has a long-standing tradition of interdisciplinary research, and, thus, offers faculty an unusual opportunity to interact with colleagues from other departments. Applicants are required to have a doctorate in engineering. The Department has existing graduate programs in advanced infrastructure systems; environmental engineering, science, and management; and mechanics, materials, and computing, and maintains strong interdisciplinary ties with other programs (<http://www.ce.cmu.edu/>). Review of applications will begin on **September 1, 2006**, and will continue until the position is filled. E-mail inquiries concerning this position may be sent to the Chair of the search committee.

Interested candidates should send a resume, transcripts or a list of graduate courses taken, statement of research and teaching interests, one publication or manuscript, and a list of at least three references to:

Dr. Amit Acharya
Chair of Mechanics, Materials and
Computing Search Committee
Department of Civil and Environmental
Engineering
Carnegie Mellon University
Pittsburgh, PA 15213-3890
E-mail: acharyaamit@cmu.edu

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Carnegie Mellon

Positions Available



Faculty Positions: Energy and Geo-Environmental Engineering

The Department of Energy and Geo-Environmental Engineering at The Pennsylvania State University, has up to four (4) tenure track positions at the assistant or associate professor levels. We seek candidates with strong backgrounds and experience in one of the following areas: energy policy and management, energy and materials, and energy science and engineering. Desired research areas that complement the existing faculty expertise include energy economics/policy and management, catalytic and separation materials for efficient energy production, biofuels/bioenergy, solar energy, hydrogen technology, fuel cells, fossil fuels, sub-surface science and engineering, and computer simulations for energy conversion. Candidates will help fulfill the teaching, research, and service missions in the undergraduate programs in energy engineering and energy business and finance, and the graduate program in energy and geo-environmental engineering. The department intends to expand its graduate program to include energy policy and management. The department has a strong general education program with in-class and online courses in energy for undergraduate students.

Applicants with doctoral degrees and research and teaching experience in energy-related disciplines are encouraged to apply. Applicants with undergraduate science or engineering degrees and graduate degrees in economics or business/management are strongly encouraged to apply for the energy policy and management position. Successful candidates are expected to develop externally funded research programs and become leaders in energy science and engineering or energy policy and management. They may also be affiliated with one of Penn State's research institutes such as the Material Research Institute, the Penn State Institutes of the Environment, the Energy Institute, and the Earth and Environmental Systems Institute.

Salaries will be commensurate with rank and experience. Review of applications will begin on October 15, 2006 and will continue until the positions are filled.

Applications should include: 1) Cover letter indicating preferred area of interest, 2) Curriculum vitae including publication list, 3) A concise statement of research and teaching interests within five pages, and 4) Names and contact information of at least three references. Mail applications to the Energy Engineering and Management Search Committee Chair, Department of Energy and Geo-Environmental Engineering, The Pennsylvania State University, 117 Hosler Building, University Park, PA 16802. Electronic submissions to jxa1@psu.edu are encouraged.

Women and members of underrepresented groups are encouraged to apply. We promote excellence through diversity and encourage all qualified individuals to apply.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

PENN STATE *Making Life Better*

FACULTY POSITION Department of Chemistry & Biochemistry Texas State University at San Marcos

The Department of Chemistry and Biochemistry at Texas State University at San Marcos seeks to fill a tenure-track position at the assistant/associate professor level in the area of materials science with emphasis in polymers and organic chemistry to begin in the Fall of 2007. A PhD degree in chemistry/materials science or closely related field is required. Postdoctoral experience is strongly recommended. The candidate will be expected to establish an active externally funded research program at Texas State University in an area complementary to the current research programs of faculty in the department. The successful candidate may have undergraduate and graduate teaching responsibilities in the area of organic and polymer chemistry. Development of materials science courses will be encouraged in support of plans for a PhD program in materials science.

Applicants are requested to submit a CV, a summary of research plans, a short description of teaching philosophy, unofficial undergraduate and graduate transcripts, and arrange for three letters of recommendation be sent to:

Dr. Gary W. Beall
Department of Chemistry
and Biochemistry
Texas State University
601 University Drive
San Marcos, TX 78666

Review of applications will begin **November 1, 2006**, and will continue until the position is filled.

Texas State University at San Marcos is located in the burgeoning Austin-San Antonio corridor in the edge of the hill country, and is Texas' sixth largest campus with more than 27,000 students. The department of chemistry and biochemistry currently has 20 faculty, 30 masters students, and an average of 300 majors who are strongly encouraged to participate in research. The department hosts excellent polymer processing and testing equipment. For more information please visit <http://www.txstate.edu/chemistry/>. The university is developing new programs in materials science and engineering.

Texas State University at San Marcos is an equal opportunity employer. Women and members of underrepresented minorities and individuals with disabilities are encouraged to apply.

TEXAS STATE
Department of Chemistry & Biochemistry

Positions Available



*WE PREPARE STUDENTS TO
CREATE THE FUTURE*

Dean of the College of Engineering

Michigan Technological University invites applications and nominations for the position of Dean of the College of Engineering. The Dean of Engineering is the chief academic and administrative officer for the College of Engineering and reports directly to the Provost. The Dean is responsible for strategic planning, development, and administration of the college, as well as managing relationships with other University units and outside educational institutions, alumni, government, and the private sector. The Dean will be central in realizing the University's vision to grow as a premier research university of international stature and achieving Top 50 status as a public university.

To receive full consideration, candidates must demonstrate scholarly activity appropriate for a tenured appointment as full professor, with distinguished research, teaching and service, and a demonstrated ability to attract funding. The successful candidate will be a proven leader with excellent communication and interpersonal skills and a commitment to diversity. Experience in strategic planning, fundraising, and technology transfer is desirable. For more information about this position, including application information, please visit our web site at <http://www.admin.mtu.edu/hro/facpers/facvac.htm>.

Review of applications will commence immediately and will continue until the position is filled. For full consideration, applications should be received by **October 15, 2006**. Please submit nominations, inquiries, or application materials, including a cover letter, current vitae, and contact information for four references to:

deansearch@mtu.edu, or
Dean of Engineering Search
Michigan Technological University
Minerals and Materials Building
Room 712
1400 Townsend Drive
Houghton, MI 49931-1295

*Michigan Technological University is an Affirmative
Action/Equal Opportunity Employer*



Faculty Position

The Department of Electrical Engineering at The Pennsylvania State University, University Park, invites applications for a tenure-track position in the areas of solid-state electronic and photonic device technology. Priority will be given to the candidates at the rank of Assistant Professor, but truly exceptional candidates at other ranks will also be considered. Areas of particular interest include, but are not necessarily limited to, thin-film and large-area devices, organic semiconductor devices, energy conversion devices, heterogeneous integration of electronic, photonic, and biological devices and circuits, and 3-D and low-dimensional devices.

Candidates with outstanding academic credentials, a strong and readily identifiable research record, and interest in teaching at the undergraduate and graduate level are encouraged to apply. Successful candidates will be expected to develop sponsored research programs, initiate and participate in interdisciplinary research activities, show leadership and excellence in academic and scholarly activities. Applicants must have a Ph.D. degree in Electrical Engineering or a closely related discipline.

Applications including detailed professional resume, statement of research and teaching goals, and names of at least four professional references should be sent to: Professor Craig A. Grimes, Chair Faculty Search Committee, The Pennsylvania State University, 129 Electrical Engineering East, Box B-22994, University Park, PA 16802. The files can also be sent in PDF format electronically to: cgrimes@engr.psu.edu. Resumes accepted until position is filled.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

PENN STATE Making Life Better

**JUNIOR FACULTY POSITION
Chemical Engineering Department
J.B. Speed School of Engineering
University of Louisville**

Applications are invited for one or more tenure-track faculty positions in the Chemical Engineering Department at the Assistant Professor level. Successful candidates will teach undergraduate and graduate courses in chemical engineering and will be expected to develop a nationally-recognized, externally funded research program. Preferred research area for one position is advanced materials, with preference given to candidates who can work with the proposed Institute for Advanced Materials. Research area for a second position is open, but preference will be given to candidates who can strongly contribute to the core teaching mission of the department. Candidates should have a bachelor's degree in Chemical Engineering and an earned doctorate, preferably in Chemical Engineering.

Review of applications will begin on **October 1, 2006** and will continue until the position is filled. Applicants must apply on-line at www.louisville.edu/jobs and reference Job ID # 014267. Attach curriculum vitae, addresses of three references, and a brief statement of research and teaching interests.

*The University of Louisville is an equal opportunity, affirmative action employer.
Minority and female candidates are encouraged to apply.*

Place Your Ad Today!

Contact—

**Mary E. Kaufold at 724-779-8312, or
kaufold@mrs.org**