

Positions Available

FACULTY POSITIONS

Bourns College of Engineering



The Bourns College of Engineering at the University of California, Riverside invites applications for tenure-track faculty positions at the Assistant Professor rank, or tenured senior level positions for exceptional candidates, in the area of materials and energy. Applications are especially encouraged from individuals with research interest in biomaterials, materials for clean energy conversion and storage, and 3-D electronics. The successful candidate will be affiliated with the Materials Science and Engineering (MSE) program which integrates across all five departments in the college, and will join any of these departments, but preference will be given to Bioengineering, Chemical and Environmental Engineering, or Mechanical Engineering. Applicants should have a PhD degree in an MSE-related field, show outstanding potential for initiating and/or sustaining strong extramurally funded research, and must be committed to excellence in undergraduate and graduate education. Individuals with vigorous research programs and demonstrated productivity are strongly encouraged to apply for the senior rank. More details are provided at www.engr.ucr.edu/facultysearch/.

The Bourns College of Engineering is proud of its faculty's accomplishments and commitment to the education of a diverse group of undergraduate and graduate students. The College currently has 84 faculty members, 1750 undergraduates, 470 graduate students, and more than \$30 million in annual research expenditures. The College is home to four interdisciplinary and multidisciplinary research centers: The Center for Environmental Research and Technology (CE-CERT), the Center for Research in Intelligent Systems (CRIS), the Center for Nanoscale Science and Engineering (CNSE), and the Center for UC LIGHT.

The search committee will begin reviewing applications as early as **February 1, 2010**. To apply please register through the weblink at www.engr.ucr.edu/facultysearch/ and submit the requested PDF files. For inquiries and questions, contact us at facultysearch@engr.ucr.edu.

The University of California, Riverside is an Equal Opportunity/Affirmative Action Employer.



Faculty Position in Mechanical & Aerospace Engineering

The Department of Mechanical and Aerospace Engineering at the University at Buffalo, State University of New York seeks an outstanding individual for a tenure-track position at the assistant professor level. Candidates with expertise in any area of mechanical or aerospace engineering including, but not limited to, bio-inspired engineering, complex and biological fluid flows, control and design under uncertainty, materials science & engineering, large scale computing, and simulation based design are encouraged to apply. Applicants with original and creative visions of research will be given high priority.

Interested candidates should review the department website
(<http://www.mae.buffalo.edu>)
for additional information.

Applicants must submit an on-line application through the University at Buffalo Human Resources website at <http://hr.buffalo.edu>; select "Find Jobs at UB", select "Search & Apply for Jobs" (Posting #0900490).

For full consideration, applications should be submitted by February 15, 2010. Women and other under-represented minorities are especially encouraged to apply.

The University at Buffalo is an Equal Opportunity/Affirmative Action Employer/ Recruiter.



College of Engineering – Faculty Appointments

Being one of the largest engineering colleges in the world, NANYANG ENGINEERING is recognized for its strength in both education and research, and boasts a confluence of multi-national faculty and diverse talent that are distinguished in many emerging fields of engineering. More information can be accessed via www.coe.ntu.edu.sg. NANYANG ENGINEERING actively promotes complementary synergy and trans-disciplinary activities among its six engineering schools, to continually evolve its research landscape to be a leader in science and engineering research.

As part of its on-going drive to excel, NANYANG ENGINEERING invites motivated persons who can flourish in the prevailing, unparalleled, research-oriented environment in this university, and in Singapore, to apply for faculty positions. Many positions of all ranks are available in various engineering schools. The aspiring candidate should possess a PhD from a well-recognized university, and must have a strong passion and commitment to excel in both research and teaching. In addition, candidates for senior appointments must have a demonstrated leadership position in their field of expertise.

Applications and enquiries are invited in emerging fields, which include but not limited to the following broad areas:

Engineering and Medicine

- Bio-informatics
- Pharmaceutical and Biomolecular Engineering
- Synthetic Biology and Bio-physiology
- Medical Devices
- Remote Healthcare

Energy

- Electrical Power and Energy
- Hybrid Power Systems
- Materials and Devices for Energy Harvesting and Storage

Sustainable Living

- Environmental Chemistry
- Green Building Systems and Materials
- Risk Analysis and Management
- Protective and Resilient Systems
- Urban Infrastructure

Intelligent Media, Systems and Computing

- Artificial or Computational Intelligence
- Digital Media Processing
- High Performance Computing
- Machine Learning and Intelligent Agents
- Systems Engineering applied to Transportation and Healthcare
- Bio-mimicry
- Information Security

For information on the submission guidelines, please refer to <http://www.ntu.edu.sg/ohr/career/submitApplications/pages/faculty.aspx>. Electronic submission of application should be forwarded to **Dean, College of Engineering** at d-coe@ntu.edu.sg.

Positions are open until filled but review of applications will begin immediately.

www.ntu.edu.sg

Positions Available

NIST
PROJECT LEADER
Nanoscale Measurements for Solar Fuels and Energy Storage Technologies
National Institute of Standards & Technology



The Center for Nanoscale Science and Technology (CNST) at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD is seeking exceptional scientists or engineers with a strong record of creativity and achievement in the following areas:

- solar fuels, artificial photosynthesis, and photocatalysis
- synthesis and characterization of inorganic-based nanomaterials for application in batteries, ultracapacitors, solid-state fuel cells, and other energy-relevant applications

The applicant should have an extensive background in Chemical and/or Material Sciences, and a strong interest in developing new instrumentation and measurement methods for the nanoscale characterization of the relevant chemical, material, and physical processes. The applicant must possess the leadership abilities required to build a thriving research program; have a successful record of interacting with multiple disciplines; be interested in contributing to ongoing projects within the CNST and NIST related to measurements of energy-related processes, materials, and devices; and be able to effectively communicate with a wide variety of audiences.

For additional information about the Center for Nanoscale Science and Technology please visit http://www.nist.gov/cnst/upload/CNST_brochure.pdf. Positions may be filled at any appropriate level (NIST pay band III-V, salary \$60,989 to \$153,200). Federal employees also receive a generous benefit package, please visit <http://www.nist.gov/hrmd/benefits/summarychart.htm>. Candidates must have a PhD degree in chemical science, engineering, or physical science, or equivalent experience combined with education. Experience in one or more of the research areas described are required.

Please send a CV along with a statement of research interests to CNSTjobs@nist.gov. Applications will be considered on a continuing basis.

The Department of Commerce is an Equal Opportunity Employer. US citizenship is required.



ENDOWED CHAIR
Materials Engineering

Tulane University invites applications for the Jung Chair in Materials Engineering, a chaired faculty position in the Department of Physics and Engineering Physics. The successful candidate will lead and expand the department's research efforts in novel materials and related devices; develop an internationally recognized, externally funded research program; and collaborate with current research groups and other departments at Tulane.

Applicants must possess a doctorate in engineering, demonstrated excellence in research and teaching at the senior faculty level, and an outstanding record of research funding and scholarly publications. Application review began on November 16, 2009, and will continue until the position has been filled. Applicants should submit a cover letter, CV, research plan, and contact information for five references to: Jung Chair Search, Dept. of Physics, Tulane University, New Orleans, LA 70118-5698. Further information can be found at <http://www.physics.tulane.edu>. Inquiries can be directed to Prof. Fred Wietfeldt at few@tulane.edu.

Tulane is an EO/AA employer.



**Massachusetts
Institute of
Technology**

Come work with us!

Faculty Position

Department of Materials Science and Engineering

The Department of Materials Science and Engineering seeks a candidate for a tenure-track faculty position to begin July 2010 or thereafter. Appointment would be at the assistant or untenured associate professor level. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the graduate and undergraduate levels, research, and supervision of student research. We will consider candidates with backgrounds and interests in materials science and engineering or a related field. Candidates should hold a Ph.D. in materials science and engineering or a related field by the beginning of the appointment period. The candidate should have demonstrated excellence in original research.

Interested candidates should submit application materials electronically at <https://dmsefacsrch.mit.edu>. Each application should include a curriculum vitae, the names and addresses of three or more references, a statement of research interests, and a statement of teaching interests. We request that each candidate arrange for reference letters to be uploaded at <https://dmsefacsrch.mit.edu/letters/>.

**Questions should be addressed to
DMSE-Search-Master@dmsefacsrch.mit.edu**

Responses received by January 1, 2010, will be given priority.

We especially encourage minorities and women to apply because of MIT's strong commitment to diversity in engineering education, research, and practice.

<http://web.mit.edu>

Faculty Position in Mechanical Engineering

in the area of Energy
CALIFORNIA INSTITUTE OF TECHNOLOGY

The Division of Engineering and Applied Sciences at the California Institute of Technology seeks applications for a tenure-track faculty position in Mechanical Engineering with research and teaching interests in areas concerning energy. Areas of interest include, but are not restricted to, fundamental issues of thermal sciences, transport, mechanics or systems that impact energy technologies. The search is aimed at the assistant professor level, but exceptional candidates at all levels will be considered. Initial appointment at the assistant professor level is normally for four years, and is contingent upon completion of Ph.D.

Review of the applications will commence on January 1, 2010 and continue until the position is filled.

Applicants should electronically submit an application including (as a single pdf document) your curriculum vitae; a statement of research and teaching interests; and up to three representative publications.

Please use our on-line application system at:
<http://www.eas.caltech.edu/positions/me-energy/>



CALIFORNIA INSTITUTE OF TECHNOLOGY
Division of Engineering and Applied Science
Caltech is an Equal-Opportunity/Affirmative-Action Employer.
Women, minorities, veterans, and disabled persons are encouraged to apply.

Positions Available

ASSISTANT OR ASSOCIATE PROFESSOR
 Department of Physics, Applied Physics and Astronomy

BINGHAMTON
 UNIVERSITY
 STATE UNIVERSITY OF NEW YORK

Outstanding applicants are being sought for a tenure-track position at the Assistant Professor level in the Physics Department at Binghamton University. Exceptionally experienced and well-qualified applicants will be considered at the rank of Associate Professor. The department seeks applicants with the ability to build and maintain an independently sponsored research program, with a commitment to teaching which includes engaging Physics Majors both in research and in the classroom. We are particularly interested in building our graduate program in the experimental areas of Condensed Matter Physics and Materials Science. A PhD degree in Physics and postdoctoral experience are required. The University has made substantial investments in its research infrastructure in the physical sciences, including funding of the Innovative Technologies Complex with more than \$20 million in state-of-the-art analytical equipment and the Center for Advanced Microelectronics Manufacturing with more than \$30 million for roll-to-roll processing equipment. Both of these facilities complement a new \$2 million nanofabrication facility in the Department of Physics.

Applicants should submit a full vita, statement of research, statement of teaching philosophy, and a list of three references in a single PDF to **BinghamtonPhysics@gmail.com**. The selection process will begin on **January 15, 2010** and continue until the position is filled.

*Binghamton University is an affirmative action/equal opportunity employer.
 Members of minority groups and women are especially encouraged to apply.*

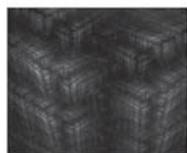
FACULTY POSITION
Experimental Condensed Matter Physics

UK
 UNIVERSITY OF
 KENTUCKY

The Department of Physics and Astronomy at the University of Kentucky invites applications for a tenure-track Assistant Professorship in experimental condensed matter physics with an intended focus on thin-film synthesis and characterization. Successful candidates are expected to establish independent research programs and strongly participate in our multidisciplinary **Center for Advanced Materials**, which is adding four initial tenure-track positions during 2008-11.

Applicants should submit a curriculum vitae and brief statements of research accomplishments and future research plans, and arrange for three letters of recommendation to be sent to: Ms. Diane Yates (diane.yates@uky.edu), Department of Physics and Astronomy, University of Kentucky, Lexington, KY 40506-0055. Initial consideration of applications will begin on **January 15, 2010**, with an anticipated starting date of August 2010.

The University of Kentucky is an Affirmative Action/Equal Opportunity University that values diversity and is located in an increasingly diverse geographical region. It is committed to becoming one of the top public institutions in the country. Women, persons with disabilities, and members of other underrepresented groups are encouraged to apply.



imdea
 materiales

Scientist Positions

IMDEA-Materials (Madrid Institute for Advanced Studies of Materials) is a non-profit, private research institute, recently founded by the Comunidad de Madrid, to carry out research in Materials Science and Engineering in Madrid (Spain). IMDEA-Materials is committed to excellence in research and to foster technology transfer to the industrial sector in a truly international environment. More information about the research and scope of the activities of IMDEA-Materials can be found at the institute webpage <http://www.materials.imdea.org>.



EUROPEAN UNION
 European Social Fund

IMDEA-Materials is looking for Senior Scientists (tenured positions), Junior Scientists (tenure-track positions) and Postdoctoral Researchers in the following areas:

- **Processing of Metallic Materials** to develop innovative strategies and to improve current methods of manufacturing near net-shape components for high temperature structural applications (Ni-based superalloys, intermetallics) and light weight alloys (Mg, Al) for the aerospace and automotive sectors. Techniques of particular interest include casting, secondary processing (forging, extrusion), and novel methodologies (rapid prototyping, electron-beam melting, direct-metal laser-sintering, etc.).
- **Computational Design of Metallic Materials** to predict the influence of alloy composition and processing route on the microstructure (phases, precipitation, segregation, grain size and shape, texture, etc.) through advanced numerical modeling (computational thermodynamics, phase-field modeling, etc).
- **Advanced Processing of Structural Composites** with particular emphasis on out-of-autoclave consolidation of prepegs, pultrusion, VARTM, RFI, and processing of thermoplastic composites (glass-mat strands and long fiber reinforced thermoplastics direct-process).
- **Virtual Processing of Structural Composites**, including numerical simulation of curing and infiltration and design of optimum preforms (braiding, stitching, 3D weaving, knitting).

Candidates should hold a doctoral degree in Materials Science (or related discipline) and demonstrate the ability to carry out independent research which combines high quality scientific research with technology transfer to industry, particularly for senior appointments. Leadership to develop an independent group within the institute's framework of research activities and good communication skills are required.

Interested candidates should submit their Curriculum Vitae (including complete contact information for two references) and a one-page statement of their research objectives through the institute's website at <https://www.imdea.org/internationalcall/>.

Positions Available



**BOSTON
UNIVERSITY**

Tenured Faculty Position
Materials Science and Engineering | College of Engineering

The College of Engineering is seeking a dynamic individual with a proven track record to lead the College's research and educational efforts in Materials Science and Engineering (MSE). This interdisciplinary position will advance research and education at the intersection of biomaterials, electronic and photonic materials, materials for energy and environment, and nanomaterials. Areas of particular interest include Soft Materials and/or Energy Materials. Other areas of world class materials research will also be considered. This person must be able to work closely with existing faculty in the College of Engineering who are working on cutting-edge experimental and theoretical problems to address crucial challenges in Materials Science and Engineering. The position will also couple with the Division of Materials Science and Engineering faculty from Physics, Chemistry, Medical, and Dental Schools.

The successful candidate is likely to be appointed as a tenured Associate or Full Professor in one or more departments based on the individual's research and educational priorities and expertise. The individual should have a strong history of external funding in addition to being internationally recognized for distinguished contributions to the field of materials science and engineering.

The College of Engineering is comprised of three departments (Biomedical, Electrical & Computer, and Mechanical) and two graduate divisions (Systems and Materials Science and Engineering) consisting of 125 faculty, 75 staff, 1200 undergraduates, and 500 graduate students. The College has risen rapidly in distinction over the past decade, being ranked in the top 40 by US News and World Report, and in the top 20 in research dollars per faculty member. Its Biomedical Engineering program is ranked in the top 10 in the nation. The College recently completed a 187,000 square foot Life Science and Engineering Building. Significant resources by the College and University will continue in this area. For more information, please visit the following WEB sites:

- <http://www.bu.edu/eng>
- <http://www.bu.edu/mse/>
- <http://www.bu.edu/energy/>

Persons interested in being considered for this position should submit a brief letter of interest and current curriculum vitae. Minorities and women are strongly encouraged to apply. Electronic applications are welcome. Nominations are welcome. All correspondences must be addressed to:

Ted Moustakas, Chair, MSE Faculty Search Committee,
at msech@bu.edu

or to:

Ted Moustakas, Chair, MSE Faculty Search Committee
Division of Materials Science and Engineering
Boston University Photonics Center
8 St. Mary's Street
Boston, MA 02215

Applications will be accepted until the position is filled.

Boston University is an affirmative action, equal opportunity employer committed to increasing the cultural and intellectual diversity of its faculty.



Sandia National Laboratories

A Department of Energy National Laboratory

Density-Functional-Theory Scientist

Sandia National Laboratories is one of the country's largest research and engineering laboratories, employing 8,100 people at major facilities in Albuquerque, New Mexico and Livermore, California. We make enduring contributions to secure our society against high consequence terrorist threats and national incidents through effective use of science, technology, and systems solutions. Please visit our website at www.sandia.gov. We are searching for Scientists in Density-Functional-Theory for the Radiation, Nano Materials, and Surface/Interface Sciences Department at the Albuquerque facility. The salary is commensurate. A benefit and relocation package is available. Must be able to obtain and maintain a DOE Security Clearance.

Lead and contribute to research efforts that capitalize on the strengths of the departments and contribute to the national security mission, broadly defined. Primary emphasis will be on condensed matter, particularly semiconductors, nanostructured materials, and interfaces. Research areas may include defects, radiation effects, materials synthesis and processing, solid-state lighting, nano-electronics, sensing, energy conversion and harvesting, and energy storage and transport. Specialize in the physics/chemistry-based theoretical understanding of these phenomena especially through DFT approaches, while working closely with experimentalists.

A PhD degree in Physics, Chemistry, Materials Science, or a related field, with emphasis on *ab initio* modeling of materials, especially density-functional-theory is required. Relevant postdoctoral experience and a strong record of individual scientific excellence, as evidenced by journal publications and scientific presentations are expected. Must have a demonstrated ability to develop and present ideas in both oral and written form and to work effectively on multiple efforts in a collaborative, multidisciplinary team environment. Must have a strong interest in connecting theoretical and experimental work and will have demonstrated the ability to define a research idea, assemble the resources and team to pursue it, conduct the research, and communicate the results. Demonstrate fundamental technical expertise, scientific flexibility, and strong interest in research areas aligned with existing and emerging national security mission needs. Curiosity about the world and a strong interest in connecting one's research to the larger context of science, society, and national security is an advantage. Excellent interpersonal skills and the ability to work in teams are very important. Experience in high performance parallel computational environments using state-of-the-art codes and approaches are strongly desired. Interest in advancing the development of codes and linkages between size regimes through understanding of the underlying science is desired, including such topics as time-dependent density-functional theory, and the connection of density-functional-theory results with molecular dynamics simulations.

Please apply online at <http://www.sandia.gov/careers/search-openings.html>, click **Search for Openings**, and reference **Job Requisition Number 63929**. U.S. Citizenship normally required.

Equal Opportunity Employer. M/F/D/V.



Positions Available



DEPARTMENT CHAIR AND RICHARD J. AND KATHERINE J. JUNEAU DISTINGUISHED PROFESSORSHIP (Tenured position) Department of Mechanical Engineering

The Department of Mechanical Engineering at Louisiana State University (LSU) invites applications/nominations for the position of Department Chair. The position will be tenured and will also carry the title of Richard J. and Katherine J. Juneau Distinguished Professorship. The department is ABET accredited and has 25 faculty members. Student enrollment in the department is approximately 450 undergraduates and 100 M.S. and Ph.D. students. LSU is the Flagship University of the State, has Carnegie Research-1 status, and a current enrollment of nearly 30,000 students.

The Department covers the traditional disciplines of Thermo-Fluids, Mechanical Systems, and Materials Science and Engineering, with several interdisciplinary groups and strong collaborations with other departments and colleges. Departmental research is supported by several centralized resource centers, including the Center for Advanced Microstructures and Devices (CAMD) which houses the only electron synchrotron facility in the southeast, the Materials Characterization Center (MCC), the Center for BioModular Multi-scale Systems (CBM2), the Center for Rotating Machinery (CeROM), and the Center for Turbine-Innovation and Energy Research (TIER). Externally funded research programs average in excess of \$3 million annually, and cover the full spectrum of research areas of mechanical engineering (for details see: <http://me.lsu.edu>). The Department of Mechanical Engineering is one of LSU's designated "Foundation of Excellence" departments.

Required Qualifications: Ph.D. or equivalent degree in mechanical engineering or related discipline; a record of achievement in externally funded scholarly research; a commitment to excellence in teaching and service to the profession. The Chair must qualify for the rank of tenured full professor within the Department of Mechanical Engineering.

An offer of employment is contingent on a satisfactory pre-employment background check. Application deadline is February 26, 2010 or until a candidate is selected. We welcome the nominations of potential candidates. For details and nominations of candidates contact: **Prof. Kalliat T Valsaraj, Chair; ME Dept Chair Search Committee; Cain Department of Chemical Engineering; Louisiana State University; Baton Rouge, LA 70803; e-mail: valsaraj@lsu.edu.**

**Apply online at: www.lsusystemcareers.lsu.edu.
Position #000640.**

*LSU SYSTEM IS AN EQUAL OPPORTUNITY/
EQUAL ACCESS EMPLOYER*

LMU

LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

FACULTY OF PHYSICS

The Faculty of Physics of the Ludwig-Maximilians-Universität München (LMU) invites applications for a

**Full Professorship (W3)
for Experimental Physics
– Nanomaterials and
Energy Conversion –**

Possible fields of fundamental research include efficient conversion, storage, saving and utilization of energy with the help of nanomaterials. Preferred focus areas are the development and investigation of novel concepts for the conversion of light energy into electrical or chemical energy, for the electrochemical storage of energy and/or for efficient light emitting materials based on hybrid nanosystems. In addition to the production and characterization of nanomaterials, fundamental research aimed at understanding the microscopic processes is highly desirable.

Participation in the interdisciplinary activities of the cluster of excellence "Nanosystems Initiative Munich" (NIM) and the "Center for NanoScience" (CeNS) as well as in local collaborative research programs is desirable. Active participation in the setup of a "LMUCenter for New Energy" is expected.

Prerequisites for this position are a university degree, a doctoral degree in science, teaching skills at university level and a post-doctoral degree (Habilitation) or equivalent qualification that may have been gained outside the university or may consist in a junior professorship. The candidate should have an outstanding record of internationally recognized research accomplishments.

In general, the age of the candidate should not exceed 52 at the time of appointment. Exceptions thereto may be considered in the case of outstanding candidates.

The LMU is an equal opportunity employer and aims to increase the number of female faculty members. Therefore, applications from female candidates are explicitly encouraged.

Disabled candidates with essentially equal qualifications will be given preference.

The LMU supports dual career couples.

Please submit your application comprising a curriculum vitae, documentation of academic degrees and certificates as well as a list of publications to **Dekan der Fakultät für Physik der Ludwig-Maximilians-Universität München, Schellingstr. 4, 80799 München, Germany, not later than 31.01.2010.**

Positions Available

FACULTY POSITIONS | Energy Science or Engineering

Stanford University, in conjunction with its Precourt Institute for Energy, seeks nominations and applications for two faculty appointments in energy science and/or engineering. The Precourt Institute (<http://pie.stanford.edu>) is Stanford's interdisciplinary hub for energy research and teaching. These are tenure-line positions that will be joint appointments in the Institute and a department appropriate to the candidate in the School of Earth Sciences, the School of Engineering, or the School of Humanities & Sciences. The appointments are expected to be at the assistant professor or associate professor (without tenure) level.

Possible areas of expertise include but are not limited to the following: conversions of energy from a renewable resource (wind, solar, geothermal, etc.), energy conversions that reduce greenhouse gas emissions, energy systems that enable greater use of renewable resources (an improved electric power grid, for example), sustainable energy, materials science of energy conversions, biofuels, energy storage on various time scales, and electrochemistry and catalysis of energy conversions.

The successful candidate is expected to conduct a vigorous research program and to be an active participant in the Precourt Institute for Energy (<http://pie.stanford.edu>) interdisciplinary energy initiatives campus-wide, and in teaching and mentoring students, in accordance with particular interests and expertise. Examples of such initiatives are the Precourt Energy Efficiency Center (<http://piee.stanford.edu>), the Global Climate and Energy Project (<http://gcep.stanford.edu>), and the Stanford Institute for Materials and Energy Science (<http://www-public.slac.stanford.edu/simes/>). Additional departments and programs engaged in energy research and teaching at Stanford are listed at <http://pie.stanford.edu/assets.html>. Candidates who currently hold faculty positions are expected to have a demonstrated record of

excellence in research and teaching. Junior candidates should have completed a doctorate before the date of appointment and show evidence of outstanding potential for research and teaching.

Applicants are required to provide the following materials: a cover letter describing research and teaching experience as well as future plans in these areas, curriculum vitae, copies/reprints of up to five publications, and a list of three to five references with complete contact information. The committee will request letters of recommendation for finalists. Please submit the requested materials in PDF format via email to fmorr@stanford.edu. Applicants who are unable to submit the materials in electronic form may mail the requested materials to:

Professor Franklin M. Orr, Jr.
Search Committee Chair
Yang & Yamazaki Environment & Energy Building
Suite 324, 473 Via Ortega, MC 4230
Stanford, CA 94305

Review of applications will begin on **15 December 2009** and will continue until the positions are filled.

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and minority groups, as well as others who would bring additional dimensions to the university's research, teaching and clinical missions.

STANFORD
UNIVERSITY



FACULTY POSITIONS Materials Science and Engineering

RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

We seek one or more tenure-track faculty members who have research interests in one or more of the following thrust areas:

1. Clean/sustainable Energy
2. Energy Storage
3. Advanced Materials/Nano
4. Biomaterials
5. Modeling

Preference will be given to candidates at the Assistant Professor level; however, outstanding candidates at higher ranks will also be considered. Must have completed PhD degree prior to start of employment. Position entails normal faculty roles of research, teaching, and service.

Applications should be e-mailed as a single PDF file to mse09@rutgers.edu. It should contain: (1) a cover letter stating your chosen thrust area, (2) a detailed research plan, (3) a 1-page teaching statement, and (4) a full CV. Letters should also be solicited from three references and sent directly to the email above. Review will begin **January 31, 2010**.

Rutgers University is an Equal Opportunity/Affirmative Action employer. Rutgers is also an ADVANCE institution, one of a limited number of universities in receipt of NSF funds in support of our commitment to increase diversity and the participation and advancement of women in the STEM disciplines.



FACULTY POSITIONS NanoScience Technology Center and Advanced Materials Processing & Analysis Center

We seek outstanding candidates for tenure or tenure-track faculty positions at all levels in the joint NanoScience Technology Center (NSTC) (www.nanoscience.ucf.edu) and Advanced Materials Processing and Analysis Center (AMPAC) (www.ampac.ucf.edu) at UCF to lead interdisciplinary nanoscience research in the broad areas of materials, energy, photonics, imaging, quantum information, and biomolecular science.

The candidate must have a PhD degree in Physics, Chemistry, Engineering, or any other appropriate discipline from an accredited institution. Candidates applying for senior positions should have demonstrated significant accomplishments in externally funded research activity and must be eligible for appointment with tenure at the associate or full professor rank.

Please visit <http://www.nanoscience.ucf.edu/news/jobs.php> to learn more about the positions and how to apply. Review of candidates will begin on November 15, 2009 and will continue until all positions are filled. Questions or concerns with the application should be addressed to Joshua Hallam at jhallam@mail.ucf.edu.

*UCF is an Affirmative Action Employer.
Women and minorities are encouraged to apply.*

Positions Available



NANOPOWER RESEARCH LABS DIRECTOR

Associate or Full Professor

The Rochester Institute of Technology invites applications for the position of Director of the NanoPower Research Labs (NPRL), a unit within the Golisano Institute for Sustainability (GIS). The mission of NPRL is to capitalize on the tremendous opportunities for developing new power generation and storage technologies through materials-based approaches, especially nanomaterials and nanodevices. RIT seeks an entrepreneurial and recognized leader to direct the NPRL in fulfilling its mission by developing emerging technologies whom has a PhD in a science or engineering field; has an Internationally recognized reputation in a field of research related to: III-V photovoltaics, carbon nanotubes, lithium ion batteries, polymer photovoltaics, and/or radioisotope batteries; as well as a proven track record of leadership of major projects involving academic, industrial and gov't participants.

The Director has overall responsibility for defining and executing the scope of NPRL research, academic activities, and interactions with external stakeholders. The successful candidate will hold the rank of Associate or Full Professor in GIS. Further information regarding NPRL can be found at: <http://www.sustainability.rit.edu/nanopower/>

THE COLLEGE/DEPARTMENT:

The GIS is dedicated to advancing sustainable production systems through academic and research programs. GIS consists of a team of faculty, engineers, technicians, project managers, and students all dedicated to an interdisciplinary approach to removing barriers to achieving sustainable production systems. GIS currently offers a Ph.D. in Sustainability where students conduct doctoral research in conjunction with its laboratories.

RIT has a diverse body of over 16,000 students enrolled. RIT has been recognized by The Chronicle as a "Great Colleges to Work For." The Rochester area has a diverse population and has been ranked the 6th "Best Places to Live in America." We are seeking individuals who are committed to contributing to RIT's core values, honor code, and statement of diversity.

APPLICATION INSTRUCTIONS FOR IRC35689:

Apply online at <http://apptrkr.com/133405>. Application deadline: January 15, 2010. Questions can be directed to the search committee chair, Professor Figer at figer@cis.rit.edu.

RIT is an equal opportunity/affirmative action employer. All individuals with the ability to contribute in meaningful ways to the university's continuing commitment to cultural diversity, pluralism, and individual differences are encouraged to make application.



Research Assistant Scientist

The Nanoscience Institute for Medical and Engineering Technologies (NIMET) at the University of Florida (UF) invites applicants for a non-tenure position as a Research Assistant Scientist to work in the Nanoscale Research Facility (NRF).

The NRF provides state-of-the-art laboratories and equipment for research and education in the areas of nanoscale science and technology (NS&T). It is a multidisciplinary user facility available to all UF faculty, students and collaborators for the synthesis, processing, and characterization of nanoscale materials, structures, devices, and sensors.

The successful candidate for this position must have a PhD and/or exceptional research and equipment experience in areas of NS&T. They will be expected to work in a fully instrumented Class 100-1000 cleanroom; be capable of learning and using advanced electron beam (e.g. SEM) and optical (e.g. Micro Raman) imaging techniques; be willing to learn explore techniques such as ion beam processing and lithography; develop skills for sample preparation, device assembly, and characterization; and learn how to operate, maintain, and improve the wide range of equipment used in NS&T.

The position requires staying abreast of emerging nanofabrication techniques, performing original research and publishing/presenting results, and will involve collaborative research to develop new equipment and nanofabrication techniques. Candidates must be able to work effectively with a diverse group of faculty and students, and train students in the use of equipment as part of their education.

Applications should be submitted through the University of Florida's Human Resources web portal <http://www.hr.ufl.edu/>. Apply to requisition number **0803286**. Applicants must include a letter of application, a statement of research interests and career goals and a CV with the names and contact information of three references. To ensure full consideration, applications with required documents should be submitted by March 1, 2010 when the Search Committee will begin reviewing applications. Applications received after this date may be considered at the discretion of the Search Committee and/or hiring authority.

If accommodation due to a disability is needed to apply for this position, please call (352)392-4621 or the Florida Relay System at 1-800-955-8771 (TDD). The University of Florida is an equal opportunity Institution.



**PROGRAM DIRECTOR
Condensed Matter Physics Program
Division of Materials Research
National Science Foundation**

The National Science Foundation is seeking qualified candidates for the position of Program Director for the **Condensed Matter Physics (CMP) Program** within the Division of Materials Research, Directorate for Mathematical and Physical Sciences.

Within the Division of Materials Research (DMR), the Condensed Matter Physics (CMP) Program supports fundamental, experimental, and combined experiment and theory projects with the goal of understanding the physics behind phenomena exhibited by condensed matter systems consisting of solid, liquid, or amorphous materials.

Applicants must possess a PhD degree or equivalent experience in condensed matter, materials physics, or a closely related field. In addition, applicants must have six or more years of successful research, research administration, and/or managerial experience pertinent to the program.

This position will be filled with a Permanent Federal Appointment or on a one or two year Visiting Scientist Appointment, a Federal Temporary Appointment, or an Intergovernmental Personnel Act (IPA) assignment under the Excepted Authority of the NSF Act with a current salary range of \$102,721 to \$160,078 including locality pay for the area.

Individuals interested in applying for this vacancy should submit their materials to announcement (E20100007-Permanent and E20100008-Rotator). The position requirements and application procedures are located on the NSF Home Page at www.nsf.gov/about/career_opps/. Hearing-impaired individuals should call TDD at 703-292-8044. If you have questions about the application process, contact Johane Pace at 703-292-7493 or adsearch@nsf.gov. Applications must be received by **January 29, 2010**.

NSF is an Equal Opportunity Employer

**TENURED FACULTY POSITION
Department of Mechanical and
Industrial Engineering**



Northeastern University

The Department of Mechanical and Industrial Engineering at Northeastern University invites applications and nominations for a tenured faculty position beginning in September 2010 at the Associate or Full Professor level. Candidates with well established, well funded, and internationally recognized research programs are sought to expand the department's research efforts. The position is in the general area of **Nanotechnology**, preferably with an emphasis in **mechanics**. Collaboration with our NSF funded Center for High-rate Nanomanufacturing as well as excellence in teaching are expected.

Applications will be reviewed until the position is filled. Northeastern is the recipient of an NSF-funded ADVANCE grant for promoting the careers of women in engineering and science. For more information, contact Professor George G. Adams at adams@coe.neu.edu.

To apply, go to <http://www.coe.neu.edu> and click on Faculty Positions, then Full-Time, and Requisition Number 112785.

Northeastern University is an equal opportunity/affirmative action/ Title IX employer. All persons are invited to apply regardless of race, color, gender, national origin, religion, disability, or sexual orientation.

Positions Available

ASSISTANT PROFESSOR



The Department of Materials Science and Engineering at the University of Washington seeks to hire a tenure-track assistant professor in the area of molecular engineering to start Fall 2010.

The candidate for this position should have an excellent record in the field of molecular engineering and science (MoES) with particular emphasis on broadly defined energy and biomedical/nanomedicine areas. The candidate's work should be interdisciplinary in nature with potential to establish collaborations with other departments in chemical, physical, biological sciences, engineering, and medicine. The selected faculty will have ample opportunities to collaborate with a broad spectrum of interdisciplinary centers and institutes including the NSF-STC on Materials and Devices for Information Technology, the NSF-MRSEC on Genetically Engineered Materials Science and Engineering Center, the NIH-funded Microscale Life Science Center, and the Institute of Advanced Materials and Technology. A PhD degree is required. Candidates in the final stages of a doctoral degree program may be considered. Successful applicants for this position will be expected to provide innovative and quality teaching that integrates research with instruction. He/she will be expected to teach both undergraduate and graduate courses within the Department and to develop high quality interdisciplinary research programs.

Information about the department is available at <http://depts.washington.edu/mse/>. The University of Washington was awarded an Alfred P. Sloan Award for Faculty Career Flexibility in 2006. In addition, the University of Washington is a recipient of a National Science Foundation ADVANCE Institutional Transformation Award to increase the participation of women in academic science and engineering careers. The University of Washington is building a culturally diverse faculty and strongly encourages applications from women and minority candidates. The University of Washington is an Affirmative Action, Equal Opportunity employer.

HOW TO APPLY: Application materials must be submitted online via the Faculty Search Tool at <http://www.engr.washington.edu/facsearch/?dept=mse> (click on Position AA2452). Applicants should include a letter of application, a detailed resume with list of publications, statement of research, statement of teaching (3-page max for each), and a list of five references. Evaluation of applicants will start on January 4, 2010 and continue until the position is filled. Questions about the details of this search or position should be directed to Mr. Jay Montague by email to montague@u.washington.edu.

BROOKHAVEN NATIONAL LABORATORY **SCIENTIFIC STAFF POSITION**
Center for Functional Nanomaterials

The Center for Functional Nanomaterials (CFN) at Brookhaven National Laboratory is seeking candidates for a Scientific Staff Position at the Assistant or Associate level. Requires a PhD degree in physics, chemistry, or materials science and at least two years of postdoctoral experience at the time of appointment. The primary focus and expertise for this position will be in development and application of computational approaches to understand properties of nanostructured materials. Research accomplishments in the development of algorithms and computational methods with impact on the understanding of nanostructured materials and their functional properties are expected.

Of particular interest are multiscale approaches to determine structure and functional properties, but all candidates with strong accomplishments in methods applicable to nanostructured materials will be considered. Good communication and interpersonal skills are required. The successful candidate will join the interdisciplinary Theory and Computational Group on the Center for Functional Nanomaterials (CFN) at Brookhaven National Laboratory. The candidate will be responsible to establish a vigorous, independent research program and to actively engage in research activities with external users of the CFN facilities. The overarching theme of internal research at the CFN is the development and understanding of nanostructured materials with impact on energy, e.g. utilization of solar energy. The research program of the candidate will be expected to connect to and have impact on one or more of the internal research themes. The level of the position will be based on the background and experience of the selected candidate. Under the direction of M. Hybertsen, Center for Functional Nanomaterials, Group Leader of Theory and Computation Group.

Please go to www.bnl.gov, click on **Jobs** and then **Search Job List** to apply for this position. Please apply to **Job ID #15111**.

Brookhaven National Laboratory is an equal opportunity employer committed to building and maintaining a diverse workforce.

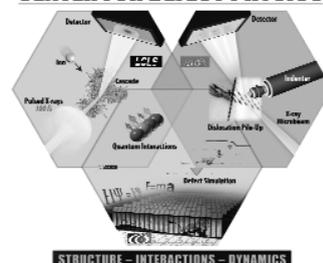
POSTDOCTORAL RESEARCH FELLOWS
for the Center for Defect Physics

The "Energy Frontier Center for Defect Physics in Structural Materials" (CDP) has several postdoctoral fellowships available for highly motivated researchers in Experimental and Theoretical Materials Science and Materials Physics.

The CDP is one of the 46 Energy Frontier Research Centers (EFRC) recently funded by the Department of Energy's Office of Basic Energy Sciences (BES). The Center's research agenda is to provide the fundamental scientific knowledge to facilitate atomistic control and manipulation of the defects, defect interactions, and defect dynamics with the goal of charting new pathways to the development of improved materials. The Center deploys first-of-their-kind measurements and models of defects in the areas of the:

- Fundamental Physics of Defect Formation and Evolution during Irradiation
- Fundamental Physics of Defect Interactions during Deformation
- Quantum Theory of Defects and Interactions

CENTER FOR DEFECT PHYSICS



To review the specific areas of expertise required and qualifications necessary for these positions, visit <http://tinyurl.com/l2uqpk> and reference positions CDP01-ORNL (Experiment) and CDP02-ORNL (Theory).

Additional information regarding the CDP can be found at <http://cdp.ornl.gov>.

Positions Available

RESEARCH POSITION

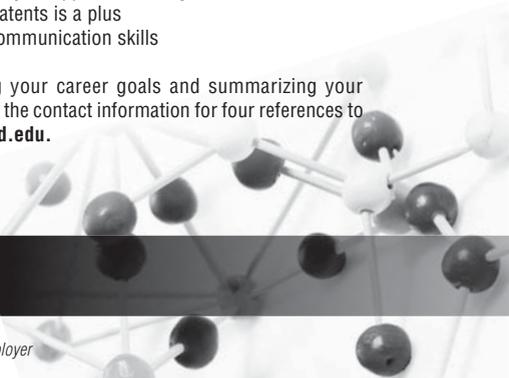
**Laboratory for Bioresponsive Materials in Therapy and Diagnosis
University of California San Diego**

A research position is available in the Laboratory for Bioresponsive Materials in Therapy and Diagnosis at the University of California San Diego. The position requires a PhD degree in pharmaceuticals, materials science, chemistry, chemical engineering, bioengineering, or polymer science or equivalent experience.

Additional requirements include:

- Knowledge in polymer synthesis, characterization, and processing
- Experience in cell biology, tissue culture, and handling of biopharmaceuticals
- Physicochemical characterization of materials
- Material science and surface chemistry as applied to biological interactions
- A record of technical publications, patents is a plus
- Must have strong oral and written communication skills

To apply, send a cover letter detailing your career goals and summarizing your research accomplishments, your CV, and the contact information for four references to Prof. Adah Almutairi at aalmutairi@ucsd.edu.



University of California is an Equal Opportunity Employer

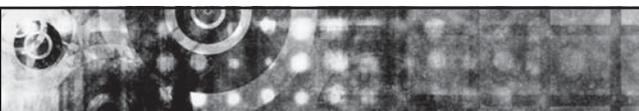
**TENURE-TRACK POSITION
Department of Mechanical and
Industrial Engineering
Montana State University**

The Department of Mechanical and Industrial Engineering at Montana State University (MSU) invites applications for a tenure-track position in Mechanical Engineering at the Assistant Professor level. The successful candidate will have an active research interest in materials engineering; specific focus areas include energy materials, polymers, active/functional materials, biological materials, and nanostructured materials.

The new faculty member will be expected to contribute to excellence in both undergraduate and graduate teaching in Mechanical Engineering and develop a nationally-recognized externally-funded research program in materials engineering.

Screening of applications will begin **February 15, 2010**. A complete position announcement with detailed application instructions can be found at <http://www.montana.edu/cgi-bin/msuinfo/fpview/f/1038-2>.

ADA/AA/EO/Veterans Preference



**Director
Institute for NanoScience, Engineering and Technology**



Northern Illinois University (NIU), in partnership with Argonne National Laboratory, invites applications for the position of Director of INSET, the Institute for Nanoscience, Engineering and Technology, at NIU. INSET integrates advances in nanoscience and nanotechnology, and explores the methods by which the novel fundamental properties occurring on the nanoscale may be engineered into nanodevices. Such nanodevices are expected to revolutionize information technology, energy conversion, medical and biotechnologies, and many other aspects of everyday life. INSET encompasses excellent facilities at NIU and is a partner in several capabilities at Argonne. A description of INSET may be found at the following web link: <http://www.inset.niu.edu/inset>.

In addition, the Institute promotes joint graduate appointments, interdisciplinary fellowships, and Distinguished Graduate Fellowships between Northern Illinois University and Argonne National Laboratory.

The successful candidate will be a distinguished scientist with an outstanding record of research accomplishments and successful program building, and a demonstrated ability to manage and lead a multi-PI research activity. The Director is expected to take the leadership role in defining the future directions of INSET, including development of

new resources, and coordination of joint interdisciplinary research efforts between NIU and Argonne. The Director will hold a three year, annually renewable contract and a tenure-eligible faculty appointment. The Director will report to the Vice President for Research at NIU and the Associate Laboratory Director for Energy Sciences and Engineering at Argonne.

Qualifications of the Director include:

- PhD degree in engineering or physical science in an appropriate discipline, and research experience in an area relevant to topics of interest for NIU and Argonne.
- Must meet criteria for an academic appointment at a senior rank in an appropriate college/department.
- Demonstrable management and leadership skills in an interdisciplinary, federally funded research environment.
- Ability to perform effective outreach and to form and nurture partnerships with external stakeholders.

It is also desirable that the Director be a U.S. citizen and have the ability to obtain/maintain a DOE "Q" level security clearance.

HOW TO APPLY:

To apply, please send a letter of application addressing the position description above, a curriculum vita, publication list, research plan, current grant support, and the names and contact information of five professional references to:

Harold A. Kafer, Deputy Provost
Altgeld Hall 220C
Northern Illinois University
DeKalb, IL 60115-2886
Phone: 815-753-8289

Applications may also be sent electronically to Kathy Carey, Administrative Assistant to the Provost, at kjahns@niu.edu. Review of applications will begin **February 1, 2010**, and continue until the position is filled.

Argonne is a U.S. Department of Energy laboratory managed by UChicago Argonne, LLC.

NIU and Argonne National Laboratory are equal opportunity, equal access affirmative action employers committed to achieving a diverse community.

Positions Available

**TEXAS A&M
ENGINEERING**

ENDOWED CHAIR IN MATERIALS SCIENCE AND ENGINEERING
The Dwight Look College of Engineering
Texas A&M University

The Dwight Look College of Engineering at Texas A&M University invites nominations and applications for an endowed chair professor position in the area of materials science and engineering. Exceptional candidates in any branch of materials with an international reputation of excellence are encouraged to apply.

■ **REQUIREMENTS:** Preference will be given to applicants whose research is broadly focused in the areas of energy harvesting, energy conversion, sensors, biomaterials, multifunctional and nano-engineered materials, or advanced structural materials, although applicants in other fields with extraordinary national and international stature will also be considered. It is expected that the successful candidate will lead Texas A&M's interdisciplinary Materials Science and Engineering Program. Researchers in academia as well as those in government and industry research laboratories are encouraged to submit nominations or applications.

■ **ABOUT OUR PROGRAM:** Texas A&M's Dwight Look College of Engineering is one of the largest engineering colleges in the nation, with more than 10,000 students and 12 departments. *U.S. News & World Report* ranks the Texas A&M Engineering graduate program eighth and the undergraduate program ninth among public schools.

The college is also third amongst all U.S. universities in engineering research expenditures, at more than \$200 million. Texas A&M University has made materials science and engineering a strategic focus and is committing significant resources toward enhanced infrastructure and faculty hires. The Material Science and Engineering Program is five years old, and has already grown to more than 20 faculty and 60 MS and PhD students. More information is available online at <http://msen.tamu.edu>.

■ **HOW TO APPLY:** Nominations should include the person's name and a short description of his/her qualifications. Applicants should submit a complete resume, a brief research, leadership and teaching statement, including their vision for the area and future plans, and a list of three references to:

Dr. Dimitris Lagoudas, Search Committee Chair
Department Head of Aerospace Engineering
Texas A&M University; 3141 TAMU; College Station, TX 77843-3141
E-mail: msenchair@tamu.edu

The initial screening of applicants will begin on **February 1, 2010**. However, the position will remain open until filled. A Fall 2010 start date is anticipated.

Texas A&M University is an Affirmative Action/Equal Opportunity Employer. The University is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment and strongly encourages applications from women, minorities, individuals with disabilities, and covered veterans. Employer paid advertisement.



TEXAS A&M
UNIVERSITY

Tenure-Track Professors: Center for a Sustainable Future
Cornell University, College of Engineering

Multiple Assistant and Associate Professor Positions in Energy at Cornell University. The College of Engineering in collaboration with the Cornell Energy Institute and the Cornell Center for a Sustainable Future invites applications for tenure-track faculty positions in all engineering departments.

Cornell University, located in Ithaca, New York, is an inclusive, dynamic institution that includes 11 endowed and land grant colleges with 18,000 graduate and undergraduate students. Its staff, faculty, and students impart an uncommon sense of larger purpose demonstrated by their commitment to sustainability. Research, education and on-campus energy deployment programs encourage creative ideas and best practices to further the university's mission of achieving a sustainable future for its graduates, the nation, and the rest of the world. These faculty openings are intended to promote collaborative transdisciplinary research and teaching programs focused on sustainable approaches to renewable and non-conventional energy capture, conversion, storage and integration into everyday life.

All positions are "open department" searches seeking to place outstanding candidates in departments they best match in the College of Engineering. Candidates whose research addresses critical energy technology issues and applications having regional and global scale impacts employing multi-scale theoretical modeling and empirical approaches are sought. Although the scope of these positions is intentionally broad covering a range of engineering disciplines, this search emphasizes the following areas: 1) Electric power systems -- including transmission and distribution infrastructure, smart grids, and distributed wind, solar and other renewable energy systems; 2) Materials for solar PV energy capture, storage and conversion; 3) Thermochemical processes for the conversion of biomass to fuels and energy; 4) Systems modeling of energy processes -- including technological, environmental, ecological and economic factors across their full life cycle; 5) Advanced transportation systems with increased electrification; 6) Geoengineering for energy resource recovery - including geothermal and unconventional fossil energy technologies, carbon sequestration, and related groundwater issues as applied to energy systems.

Applicants must hold a doctorate in an appropriate field, must have demonstrated an ability to conduct outstanding research and show promise for excellent teaching. Applicants should submit a cover letter outlining their qualifications for conducting research and teaching in one or more of the specific areas of energy science and engineering cited above, curriculum vitae with publications, a research plan (2-3 pages), up to three selected reprints, a statement of teaching interests, and complete contact information for at least three references. All materials should be submitted electronically to: <https://fast.ccsf.cornell.edu/>. Applications will be reviewed beginning February 2010; the searches will remain open until qualified applicants are identified.

Cornell University is an affirmative action, equal opportunity educator and employer that embraces diversity and seeks candidates who will create an environment that attracts students of all races, nationalities and genders. We strongly encourage women and underrepresented minorities to apply. Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches.



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