

Positions Available



**FACULTY POSITION  
Computational  
Materials Science  
Tulane University**

The Department of Physics and Engineering Physics invites applications for a tenure-track Assistant Professor position in Computational Materials Science, with preference for an applicant who uses density functional theory to understand and predict the properties of real materials. A PhD degree in Physics (or related area such as Physical Chemistry or Materials Science and Engineering) is required, as is postdoctoral or comparable experience.

The successful candidate would build an independent, externally funded research program and participate in undergraduate and graduate teaching in physics and materials science. Opportunities exist for collaboration with other Tulane faculty, including condensed matter theorists and experimentalists, and for participation in an anticipated expansion of the materials science effort at Tulane. There is a possibility of a joint appointment with the Center for Computational Sciences during the first four years of the appointment.

Candidates should submit a cover letter, a CV, and a research plan, and should arrange for three letters of reference to be sent to Prof. John P. Perdew, Search Committee, Department of Physics, Tulane University, New Orleans, LA 70118-5698. For full consideration, all materials should be received by **December 31, 2008**. The position starts July 1, 2009, and is subject to final approval of the administration. E-mail applications are not accepted. Further information can be found at <http://www.physics.tulane.edu/>.

*Tulane is an AA/EEO Employer.*

**RESEARCH ASSOCIATE AND  
POSTDOCTORAL POSITIONS  
Materials Synthesis and Processing**



Rutgers Department of Materials Science and Engineering seeks one Research Associate and two postdoctoral associates for ceramic synthesis and processing research. Successful candidates must have a PhD degree in materials science and engineering, chemistry, chemical engineering, or a closely related area. Candidates demonstrating exceptional research capabilities, and collaboration and project management skills will be considered for a full time research and development position by the corporate sponsor. The Research Associate is preferred to have an exemplary background in ceramic or glass research, experience in writing research proposals, managing research programs, and interest in helping start-up companies. The Postdoctoral Associates should have demonstrated scientific and technical experience in ceramic processing and/or micro-structure-mechanical properties relationships along with an ability to initiate, conduct, and publish cutting-edge research.

Review of applications will begin immediately and continue until the positions are filled. Submit curriculum vitae, three letters of reference, relevant publications, and availability date to Richard E. Riman (in care of Ms. Janet Pescinski), Department of MSE, Rutgers, The State University of New Jersey, 607 Taylor Road, Piscataway, NJ 08855-8065; [jpescins@rci.rutgers.edu](mailto:jpescins@rci.rutgers.edu); 732-445-4946 (v). **Posting number CCS2.**

*Rutgers is an equal opportunity/affirmative action employer.*



ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE

**Faculty Position in Materials Science  
at the Ecole polytechnique fédérale  
de Lausanne (EPFL)**

The School of Engineering of EPFL invites applications for a faculty position in its Institute of Materials to begin during the calendar year 2009. The opening is for a position at the **tenure-track assistant professor** level. We seek outstanding individuals who will develop and drive a research program at the forefront of the discipline, as well as contribute to curriculum development and teaching in the Bachelor, Master and Doctoral academic programs.

Top-level applicants in Materials Science and Engineering having expertise in the general area of **interfaces and multi-materials** will be considered. Topics of interest in this domain include, but are not limited to: designed multiphase materials for structural, functional, bio-related, energy-related, sustainability or recycling applications; methodologies, both theoretical and experimental, enabling the design of interfaces having tailored functionality; novel approaches towards the processing of nanoscale and hybrid materials.

Significant start-up resources and state-of-the-art research infrastructure will be available. Salaries and benefits are internationally competitive.

Applications should be submitted via the web site <http://imx-search08.epfl.ch> and should include the following documents in PDF format: curriculum vitae, publication list, brief statement of research and teaching interests, names and addresses (including e-mail) of 6 references.

The deadline for applications is **15 January 2009**.

Enquiries may be addressed to:

**Prof. Andreas Mortensen**

E-mail: [hiring.imx@epfl.ch](mailto:hiring.imx@epfl.ch)

For additional information on EPFL, please consult the web sites <http://www.epfl.ch>, <http://sti.epfl.ch> and <http://imx.epfl.ch>.

EPFL aims to increase the presence of women amongst its faculty, and qualified female candidates are strongly encouraged to apply.

**Positions Available**



**FLORIDA STATE UNIVERSITY**

**FACULTY POSITIONS • Materials Science and Engineering**

**Continuing Cluster Hire Initiative in Growth, Processing, and Characterization of Advanced Materials**

In 2006, Florida State University announced a new faculty Cluster Hiring Initiative in the **Growth, Processing, and Characterization of Advanced Materials** (<http://pathways.fsu.edu/faculty/gpcam/>) as part of FSU's Pathways of Excellence Initiative (<http://pathways.fsu.edu/>). Inaugurated in the fall of 2005, the Pathways program leverages the University's unique strengths with significant new investments in research and graduate education. This initiative is designed to hire faculty who are national and international leaders in their respective fields, or are on a clear trajectory to be so, and who work effectively in an interdisciplinary team with common intellectual goals.

The **Growth, Processing, and Characterization of Advanced Materials Cluster** is interdisciplinary, blending many engineering disciplines with chemistry, physics, and computational sciences, with a goal of bridging the most basic science at the nanoscale with large scale applications of new technologies. This hiring initiative is part of an emerging effort in Materials Science & Engineering at FSU, which includes new interdisciplinary graduate degree programs and a new Materials Research Building at the Florida State University Innovation Park site in close proximity to the College of Engineering ([www.eng.fsu.edu](http://www.eng.fsu.edu)), the National High Magnetic Field Laboratory (<http://www.magnet.fsu.edu/>), the Applied Superconductivity Center, the High Performance Materials Institute (<http://www.hpmi.net/>), and the Center for Advanced Power Systems (<http://www.caps.fsu.edu/>).

The new hires will join three recent additions to the Cluster faculty, complementing present faculty at FSU who are active in a broad spectrum of materials research. FSU is now accepting applications and nominations for up to four cluster positions:

- 1) A senior faculty position with expertise in the areas of multiscale mechanics and modeling, and processing of advanced nanocomposites and polymer composites;
- 2) A junior faculty position to lead the physical sciences transmission electron microscopy initiative. FSU has committed resources for the purchase of a forefront imaging and analytical resource. Strong parallel support for the TEM facility comes from the Departments of Chemistry, Physics, Mechanical, and Industrial & Manufacturing Engineering, the Applied Superconductivity Center and National High Magnetic Field Laboratory;
- 3) A junior faculty position with expertise in the growth and characterization of oxide thin film materials; and
- 4) A junior faculty position with expertise in nano-manufacturing, advanced materials processing, multifunctional materials development, and modeling and/or computation in materials and manufacturing. The person is expected to bring skills and expertise complementary to existing High Performance Materials Institute capabilities.

The Cluster faculty will become key members of the developing graduate materials programs at FSU and will have many opportunities to collaborate widely on campus across disciplinary and departmental boundaries. Senior candidates must have a clear international standing, an exceptional record of publishing and external funding, and a demonstrated record of scientific leadership. Junior candidates must demonstrate promise towards similar achievements. All candidates should have the appropriate terminal degree and the ability to teach at the graduate level in Materials Science & Engineering. The Cluster will favor candidates with strong communication skills and the ability and commitment to work in synergistic, interdisciplinary research programs. Appointees will be tenured or tenure-earning in an academic department to be determined during the hiring process.

Nominations should include the name, address, telephone, and email contacts for the nominee along with a brief letter addressing the nominee's qualifications. Applicants should submit a letter of interest which describes their areas of research and teaching, complete curriculum vitae, and the names and contact information of at least three references. The review of applications will commence on **December 1, 2008**, and will continue open until all positions are filled.

Letters of nomination or application should be addressed to [clusterhirechair@eng.fsu.edu](mailto:clusterhirechair@eng.fsu.edu). Only electronic applications submitted to this email address are assured full consideration.

*Florida State University is an Equal Opportunity/Access/Affirmative Action Employer.*

Positions Available



**FACULTY POSITIONS**  
**School of Engineering and Applied Sciences**  
**Harvard University**

The Harvard School of Engineering and Applied Sciences (HSEAS) is initiating a major thrust in the broad area of energy science and technology and invites applications for tenure-track positions in this area. Interested candidates with expertise in applied physics, materials science, applied chemistry, chemical engineering, and environmental engineering with a particular focus on energy-related applications are invited to apply. HSEAS offers a highly interdisciplinary environment that fosters collaboration within SEAS and with other parts of Harvard. The HSEAS effort will be part of a larger University-wide initiative on energy that aims to bring together scholars from Harvard's various schools (arts & sciences, business, design, government, law, medicine, and public health) to make a significant contribution on energy-related challenges. Candidates should have an outstanding research record and a strong commitment to undergraduate teaching and graduate training. Applicants must have completed a PhD degree by September 1, 2009. Applications from qualified women and minority candidates are strongly encouraged.

Candidates should send a curriculum vitae, a list of publications, a statement of research and teaching interests, and up to three representative papers (ideally as a single PDF document) to: **energy-search@seas.harvard.edu**. In addition, candidates should have at least three letters of reference sent to the above address. Alternatively, material may be sent via surface mail to:

Energy Search Committee  
 School of Engineering and Applied Sciences  
 Harvard University  
 Pierce Hall 207A, 29 Oxford Street  
 Cambridge, MA 02138

Applications will be reviewed as they are received. For full consideration, applications should be received by **December 31, 2008**.

*Harvard is an Equal Opportunity/Affirmative Action employer.*



**POSTDOCTORAL POSITIONS**  
**Materials Science and Engineering**  
**The University of Texas at Dallas**

The Organic Electronics Group at The University of Texas at Dallas (<http://www.utdallas.edu>) is seeking applications from qualified candidates for postdoctoral positions to work on organic electronic devices such as OLEDs, Flexible CMOS, Energy Harvesting and Storage (organic and Inorganic), and Sensors. Prospective candidates should have a PhD degree in electrical engineering, materials science, physics, or associated fields, with solid background in electronic devices, and hand-on experience in device fabrication. The successful candidate will work on independent research projects, as well as lead and organize large group activities involving graduate students at all levels of expertise.

Interested candidates should submit CV and publication list to the following e-mails: Dr. Bruce E. Gnade, [gnade@utdallas.edu](mailto:gnade@utdallas.edu); Dr. Manuel Quevedo, [mquevedo@utdallas.edu](mailto:mquevedo@utdallas.edu); and Dr. Husam Alshareef, [alshareef@utdallas.edu](mailto:alshareef@utdallas.edu).

*UTD is an equal opportunity/affirmative action employer and encourages application from candidates who would enhance the diversity of the university's faculty and administration.*



One of the oldest institutions of higher education in this country, the University of Delaware today combines tradition and innovation, offering students a rich heritage along with the latest in instructional and research technology. The University of Delaware is a Land-Grant, Sea-Grant, Urban-Grant and Space-Grant institution with its main campus in Newark, DE, located halfway between Washington, DC and New York City. Please visit our website at [www.udel.edu](http://www.udel.edu).

**Mechanical Engineering**

This is an exciting time at the University of Delaware, as we embark on our New Strategic Initiatives and our Path to Prominence (<http://www.udel.edu/prominence/>). The Department of Mechanical Engineering plays an integral part in the design to engage closely with the critical issues of our day, to increase the global impact of the University, and to raise its prominence in the world.

The Center for Composite Materials (<http://www.ccm.udel.edu/>), which boasts \$9M of research funding per year and 240 affiliated faculty, staff, post-docs, graduate and undergraduate students and interns provides a forum for composite materials and nanotechnology research. Other nanotechnology initiatives are supported by a fully equipped new state-of-the-art 7,000 sq ft clean room for nano-fabrication.

Bioengineering activities are closely coupled to our Center for Biomedical Engineering Research (<http://www.cber.udel.edu/>), which has 33 associated faculty members and a number of grants, including an \$11M NIH Center for Biomedical Research Excellence award. In addition, the inter-disciplinary effort at the Delaware Biotechnology Institute (<http://www.dbi.udel.edu/>) encompasses research, education, and economic development in the life sciences with emphasis on human health, complex environmental systems and biomaterials. This \$120M initiative involves a 72,000 sq ft state-of-the-art biotechnology facility.

The Center for Fuel Cell Research has recently been founded in our department. The UD Energy Institute (<http://www.energy.udel.edu/>) represents all of UD's world-renowned energy research in photovoltaics, wind, fuel cells, and other clean energy topics with over \$9M/year in research expenditures, and is supported by state-of-the-art fabrication facilities. Robotics and Control activities in the Department span a large range of applications that include bio-inspired designs of air vehicles, novel designs of under-actuated robots, control of multi-vehicle systems, rehabilitation and assistive devices. These projects are funded by multiple grants from NSF, NIH, and DoD. UD is a land and sea grant university and a member of University Corporation for Atmospheric Research, a broad range of research in environmental fluid mechanics is being conducted to address phenomena in the atmosphere, ocean and soil.

**CHAIR, MECHANICAL ENGINEERING**

The Department of Mechanical Engineering (<http://www.me.udel.edu/>) invites nominations and applications for the position of Chairperson. We seek someone with a national reputation for excellence in Mechanical Engineering, or closely related field. The Chairperson has general administrative authority over department affairs, exercises leadership in the formulation of policies, introduces educational ideas and proposals and stimulates discussions leading to the enhancement of the research and education programs of the Department.

Applications and nominations should be electronically submitted (preferred method) to [ME-Chair-search@udel.edu](mailto:ME-Chair-search@udel.edu); or may be sent to ME Chairperson Search Committee, College of Engineering, 102 Du Pont Hall, University of Delaware, Newark, DE 19716. All application materials shall be shared with departmental faculty. Review of applications will begin immediately and continue until the position is filled.

**FACULTY POSITION IN MECHANICAL ENGINEERING**  
**(ALL RANKS)**

The Department of Mechanical Engineering invites nominations and applications for one tenure-track faculty position at any rank. We are interested in candidates in any discipline of Mechanical Engineering but have particular interests in developing our research in the general areas of nanotechnology, composites, bioengineering, clean and sustainable energy, robotics/controls and environmental fluid mechanics.

Applicants should hold a Ph.D. in mechanical engineering, or closely related sciences, and have demonstrated excellence in innovative research and show the potential for high quality teaching and mentoring.

Applicants should send a curriculum vitae, a statement of research and teaching interests and achievements, and a list of at least four references to [me-search@udel.edu](mailto:me-search@udel.edu) (preferred); or by mail to ME Faculty Search Committee, 126 Spencer Laboratory, University of Delaware, Newark, DE 19716. Application deadline is February 1, 2009. The curriculum vitae and all application materials shall be shared with departmental faculty.

**The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.**

**Positions Available**



**FACULTY POSITION Materials Engineering**

The Washington University in St. Louis, School of Engineering and Applied Sciences invites nominations and applications for a tenured or tenure-track faculty position in materials engineering. The applicant should have demonstrated expertise in advanced materials synthesis, performance, modeling, and/or characterization. Our strategic plan emphasizes research at the intersection of engineering, medicine, and biology. However, opportunities for collaboration also exist in a variety of application areas, as well as in fundamental problems in materials engineering. Research programs of interest include: materials for sustainable energy, biomaterials, nanoscale materials synthesis and characterization, computational materials science, multi-scale materials modeling, and adaptive materials.

The successful applicant will be based in the Department of Mechanical, Aerospace, and Structural Engineering (<http://mase.wustl.edu/>), and will be expected to contribute to university-wide initiatives such as the Center for Materials Innovation, the International Center for Advanced Renewable Energy and Sustainability, the McDonnell Academy Global Energy and Environment Partnership, and Washington University's National Nanotechnology Infrastructure Network facility. Opportunities are available for joint appointments in departments throughout the university, including at the school of medicine.

The applicant must have the ability to teach effectively at both the undergraduate and graduate levels and to establish and maintain a strong, externally-funded research program. Competitive start-up funding is available. Although applicants are being sought primarily at the assistant professor level, qualified candidates for associate professor and professor will be considered. Candidates for assistant professor should have their doctoral dissertation completed or near completion. Candidates for associate professor should have an established record of quality research. Candidates for full professor should have a substantial record of scholarship and an international reputation.

Washington University in St. Louis, founded in 1853, is a medium-sized independent research university. The university is counted among the world's leaders in teaching and research and draws students (6,500 undergraduates and 5,500 graduate and professional students) and faculty to St. Louis from all 50 states and more than 90 nations.

Applications for the position and questions about the search process may be addressed by e-mail to the co-chair of the search committee, Prof. Shankar Sastry ([materials\\_search@seas.wustl.edu](mailto:materials_search@seas.wustl.edu)). To apply, please e-mail to this address a single PDF file containing: 1) curriculum vitae; 2) statements of research plan, teaching interests and philosophy, and career objectives (not to exceed 5 pages); and 3) the names, e-mail addresses, and telephone numbers of at least three references. Review of applications will begin immediately, but applications will be accepted until the position is filled.

*Washington University is an Equal Opportunity and Affirmative Action Employer. Applications from women and under-represented minority groups are strongly encouraged.*

**POSTDOCTORAL POSITION  
Applied Sciences Laboratory  
Washington State University**

The Washington State University's Applied Sciences Laboratory has an open postdoctoral position to conduct research on the mechanical properties of advanced materials. **For more information and application procedures, visit [www.asl.wsu.edu/site/careers.html](http://www.asl.wsu.edu/site/careers.html).**

EEO/AA/ADA

**Electrical and Systems Engineering**



The University of Pennsylvania seeks outstanding individuals for tenure-track or tenured faculty positions in the Department of Electrical and Systems Engineering to start July 1, 2009. Applicants must have a Ph.D. in Engineering or equivalent fields. Suitable candidates in the areas of modeling, design, fabrication and characterization of nanostructures, devices, and circuits (e.g., nanophotonic, nanophononic, nanoelectronic, molecular electronic, nanomagnetic or other novel computational devices and systems) will be considered. Candidates should be prepared to collaborate with faculty in appropriate related areas such as materials science, bioengineering, physics, chemistry, chemical engineering, mechanical engineering, and/or computer science and engineering.

The University seeks individuals with exceptional promise for, or proven record of, research achievement who will excel in teaching undergraduate and graduate courses and take a position of international leadership in defining their field of study.

Interested persons should submit an application by completing the form located on the Faculty Recruitment Web site at <https://www.seas.upenn.edu/ese/fsrch/apply.html> including curriculum vitae, statements of research and teaching interests and plans, and the names of at least three references.

The University of Pennsylvania is an Equal Opportunity Employer. Minorities/Females/Individuals with Disabilities/Veterans are encouraged to apply.

**FULL PROFESSOR  
Multiscale Materials Modeling  
University of North Texas**

The University of North Texas invites applications for a tenured Full Professor in multiscale modeling. The successful candidate will have an established international reputation with an active, externally funded research program. An earned doctorate in Materials Science and Engineering, Chemistry, Mechanical Engineering, Physics, or a related field is required. The area of specialization is broadly defined, but preference will be given to candidates who complement existing departmental strengths.

Applications must submit a cover letter describing qualifications, a CV, a narrative statement of research interests, and lists of publications and current research support. Send application materials to Multiscale Faculty Search Committee, Department of Materials Science and Engineering, University of North Texas, 1155 Union Circle #305310, Denton TX 76203-5017. Screening begins November 15, 2008 and will continue until the search is closed.

AA/ADA/EOE

Positions Available

**FACULTY POSITION**  
Department of Mechanical Engineering



The Johns Hopkins University, Department of Mechanical Engineering, invites applications for a full-time tenure-track faculty position in the general area of mechanics and materials. Modeling and simulations are of particular interest, but all outstanding candidates will be considered. Opportunities for interactions across the University include the Institute for NanoBioTechnology, the NSF MRSEC on Nanostructured Materials, the Whitaker Biomedical Engineering Institute, the Institute of Computational Medicine, the Center for Advanced Metallic and Ceramic Systems, and the NSF Engineering Research Center for Computer-Integrated Surgical Systems and Technology.

Preference will be given to applicants at the assistant professor level, but exceptionally qualified candidates at all ranks will be considered. The successful candidate must have a doctorate, and is expected to establish a strong, independent, internationally recognized research program as well as contribute fully to both undergraduate and graduate instruction.

All applications should be submitted electronically (before **January 15, 2009**) as a single PDF document to **me-search@jhu.edu**. Electronic applications should include a cover letter describing the principal expertise of the applicant, a statement of teaching and research interests and experiences, a complete resume, and the names of at least three references.

*The Department is committed to building a diverse environment; women and minorities are strongly encouraged to apply. The Johns Hopkins University is an EEO/AA Employer.*



**ENDOWED CHAIR**  
**Materials Engineering**  
Tulane University

Tulane University invites applications for the Jung Chair in Materials Engineering, a chaired faculty position in the new Division of Physical and Materials Science. The successful candidate will lead and expand the division's research efforts in novel materials and related devices; develop an internationally recognized, externally funded research program; and collaborate with current research groups in the Department of Physics 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 will begin on **November 15, 2008**. Applicants should submit a cover letter, CV, research plan, and contact information for five references to: Jung Chair Search, Department 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](mailto:few@tulane.edu).

*Tulane University is an equal employment opportunity/affirmative action/ADA employer committed to excellence through diversity. All eligible candidates are invited to apply.*

**POSTDOCTORAL FELLOW**  
**Hydrogen Storage and/or Electrochemistry**  
**Chemical and Materials Engineering**  
University of Alberta

A postdoctoral fellow position is available beginning in January 2009 in the area of metal hydrides or electrochemistry. The PDF will work on projects involving the development of hydrogen storage, battery, and/or fuel cell materials, with an emphasis on thin films and microstructure-properties relations. The laboratory facilities include volumetric and gravimetric sorption systems, high-pressure DSC, combinatorial thin films deposition, inert atmosphere powder processing, electrochemistry wet lab, and catalyst testing. There is also access to several advanced TEMs and sample prep, UHV surface analysis, and *in-situ* XRD.

A successful candidate must have demonstrated expertise in one of the above fields, as evidenced by a record of high-impact peer-reviewed publications. The hired individual will be expected to take on a scientific leadership role within the laboratory, helping to develop funding proposals and new research directions. This position also involves opportunities for collaborative work with several institutions both in Canada and the U.S.

Please send a CV and the contact information for references to:

Dr. David Mitlin  
Department of Chemical and Materials Engineering  
7th Floor, 9107 116 Street  
University of Alberta  
Edmonton, Alberta, T6G 2V4  
Email: [hsearch@ualberta.ca](mailto:hsearch@ualberta.ca)

All qualified candidates are encouraged to apply. We thank all applicants for their time and effort but only those selected for an interview will be contacted. Applicants may be considered for future vacancies. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.



**Staff Scientist**  
**Imaging & Manipulation of**  
**Nanostructures**



*Berkeley Lab's  
Molecular Foundry*

Berkeley Lab invites applications for a Staff Scientist in the Imaging and Manipulation Facility of the Molecular Foundry. The research facility focuses on advancing the science of nanoscale imaging and manipulation through studies of various properties of nanoscale structures by designing, developing and employing multiple state-of-the-art electron and scanning probe microscopes and optical imaging methods.

The Imaging Facility Staff Scientist will lead an individual innovative research program in the imaging and manipulation of nanostructures as well as perform original research in developing and employing new imaging technologies, instrumentation and materials. The candidate will also devote equal effort to supporting and collaborating with Molecular Foundry users regarding the design, implementation, research projects and evaluation of experiments in this area.

The successful candidate will have experience in imaging methods for nanoscience research, manipulation and analysis, as well as the ability to conduct creative, independent research and provide innovative recommendations.

Learn more about the opportunity and apply at [jobs.lbl.gov](http://jobs.lbl.gov) (enter 22283 in the keyword search field).

Berkeley Lab is an Affirmative Action/Equal Opportunity Employer.

The Molecular Foundry is a Department of Energy national user facility for the design, synthesis and characterization of materials with nanometer dimensions. Our mission is to conduct outstanding nanoscience research, and support and collaborate with scientists from around the world who gain access to state-of-the-art instruments, techniques and expertise to further their own nanoscience research efforts.

[Foundry.lbl.gov](http://Foundry.lbl.gov)

**Positions Available**



**FACULTY POSITIONS**  
**Department of**  
**Mechanical Engineering**  
**Boston University**

The Department of Mechanical Engineering (ME) at Boston University anticipates filling up to two openings for tenure-track or tenured faculty positions in:

- (1) micro- and nanoscale heat transport and interfacial phenomena, experimental, and theoretical nanomechanics, photoacoustic, and photothermal phenomena and,
- (2) biomedical robotics, minimally invasive sensing and actuation, and body area networks.

Although candidates at all academic ranks will be considered, preference will be given to applicants at the junior level. Candidates with interdisciplinary research interests that transcend the traditional boundaries of ME are also encouraged to apply and take advantage of opportunities for joint appointments within the Division of Material Science and Engineering, the Division of Systems Engineering, as well as other college departments.

In addition to a relevant, earned PhD degree, qualified candidates will have a demonstrable ability to teach effectively, develop funded research programs in their area of expertise, and contribute to the tradition of excellence in research that is characteristic of the ME department. BU is committed to building a culturally diverse faculty and strongly encourages applications from female and minority candidates.

Applicants should prepare a submission dossier consisting of a curriculum vita, the names and addresses of three references, and a letter of interest in which they discuss how they envision their future as teachers, mentors, and researchers. Please send the dossier to:

Professor Xin Zhang, Chair, Search Committee  
 Department of Mechanical Engineering  
 Boston University  
 110 Cummington Street  
 Boston, MA 02215

*Boston University and the Department of Mechanical Engineering are equal opportunity/affirmative action organizations.*

**ASSISTANT PROFESSOR**  
**Department of Metallurgical and Materials Engineering**  
**Middle East Technical University, Turkey**

The Department of Metallurgical and Materials Engineering of the Middle East Technical University invites applications for tenure-track positions at the Assistant Professor level, however, exceptional candidates at higher levels may also apply. Candidates at the Assistant Professor level would normally have a PhD degree in related discipline and preferably postdoctoral experience.

The Department and the University provide strong research support with access to some of the most extensive and modern facilities. The research areas of the Department are centered on three broad platforms of materials engineering, ceramic materials, and production metallurgy.

Applications are welcome from all areas of materials science and engineering, experimental or theoretical, with preference for the following areas:

- Polymeric Materials and Polymer Processing
- Production Metallurgy
- Electronic Materials and Devices
- Bio- Nano Materials

The candidates must possess a distinguished record of research accomplishments and publications, and a demonstrated ability to mentor graduate students and develop an innovative research and educational program. Successful candidates will be expected to attract external funding and build a strong sponsored-research program, lead independent research at the cutting edge of their field, and teach undergraduate and graduate courses in materials science and engineering.

All applications should be submitted electronically as a single PDF document to [mete@metu.edu.tr](mailto:mete@metu.edu.tr). Electronic applications should include 1) a current vitae, 2) a concise statement (not to exceed three pages total) of research and teaching interests and philosophy, and 3) names and addresses of three references, addressed to:

Chair, Metallurgical and Materials Engineering Department  
 Middle East Technical University  
 Ankara 06531 TURKEY

The search committee will begin reviewing applications on **January 15, 2009**. For further or follow-up information, please link to <http://www.mete.metu.edu.tr/announcements/facultysearch.htm>.



**TENURE-TRACK FACULTY POSITION**  
**Chemical Engineering and Materials Science**  
**Stevens Institute of Technology**

The Department of Chemical Engineering and Materials Science (CEMS) at Stevens Institute of Technology announces a tenure-track faculty opening in Materials Science and Engineering with an earliest possible starting date of January 1, 2009. CEMS is a research-active department at Stevens with substantial strength in chemical and biological microsystems, polymers, biomaterials, nanoenergetics, and photonic sensing and imaging. Annual research expenditure in the department is about \$3M.

Applicants should have a PhD degree in Materials Science and Engineering or a related discipline. While all relevant areas will be considered, preference will be given to candidates with research interests and expertise in biomaterials or pharmaceutical materials science. Successful applicants will be expected to develop strong extramurally funded research activities and show a clear commitment to both graduate and undergraduate training in a highly integrated and interdisciplinary

environment. The ability to cross-function in chemical engineering education will be a significant plus. Priority will be given to applicants for the rank of Assistant Professor though higher-level appointments will be considered for candidates with an appropriate level of past experience, demonstrated accomplishments, and vision for future achievement.

Applications will be accepted until the position is filled. Applicants should submit a curriculum vita, a detailed research plan including both short-term and long-term professional goals, a description of teaching interests, and contact information for at least three references to:

Chair of Faculty Search Committee; c/o Ms. Nancy Webb  
 Email: [nwebb@stevens.edu](mailto:nwebb@stevens.edu)  
 Department of Chemical Engineering and Materials Science  
 Stevens Institute of Technology  
 1 Castle Point Terrace; Hoboken, New Jersey 07030

*Stevens Institute of Technology is an equal opportunity/affirmative action employer and actively seeks the candidacy of women and minorities.*

**Positions Available**



**FACULTY POSITIONS**  
**Department of Mechanical Engineering**  
**University of Nebraska-Lincoln**

The Department of Mechanical Engineering at the University of Nebraska-Lincoln (<http://www.engr.unl.edu/me/index.html>) invites applications in the area of materials science and engineering for tenure-track or tenured faculty positions at any professorial level. Applicants should have strong scholarly achievements and a PhD degree or equivalent in materials science and engineering or closely related field. Successful candidates will demonstrate commitment to excellence in undergraduate and graduate education and will develop a leading-edge research program at UNL in emerging area(s) of materials science and engineering, such as those related to biomedical devices or alternative energy. This research should benefit from the strong interdisciplinary materials-related research programs of over 70 faculty in 13 departments and from access to the outstanding research facilities in the Nebraska Center for Materials and Nanoscience ([www.unl.edu/ncmn/](http://www.unl.edu/ncmn/)) and the NSF-funded Materials Research Science and Engineering Center ([www.unl.edu/mrsec/](http://www.unl.edu/mrsec/)).

To be considered for this position go to <http://employment.unl.edu>, requisition #080862 and complete the Faculty/Academic Administrative form attaching resume, cover letter, C.V., detailed research and teaching statement, and list of three references. Applicant reviews will begin **January 12, 2009** and continue until the position is filled.

*The University of Nebraska has an active National Science Foundation ADVANCE gender equity program, and is committed to a pluralistic campus community through affirmative action, equal opportunity, work-life balance, and dual careers.*



**OHIO RESEARCH SCHOLAR IN CHARACTERIZATION**  
**Department of Materials Science and Engineering**  
**The Ohio State University**

The Department of Materials Science and Engineering at the Ohio State University invites applications from outstanding, internationally recognized faculty candidates and researchers at the senior level to fill an Endowed Chair in state-of-the-art, nanoscale materials characterization. This Ohio Research Scholar position is one of several newly-created endowed chairs that are part of a multi-university and statewide initiative formed under the Ohio Research Scholars Program (ORSP), administered by the Institute for Materials Research at OSU, and designed to create a research cluster of excellence in technology-enabling and emergent materials. The cluster incorporates a cross-disciplinary collaboration between The Ohio State University, the University of Dayton and the University of Akron, and will coordinate with the industrial sector as appropriate. The successful candidate is expected to have a profound, leadership impact on the research cluster activities, visibility, recognized scholarship, and collaborations.

The Research Scholar position in nanoscale materials characterization will lead OSU's world-class characterization capabilities into the areas of nanoparticles, nanomaterials, and soft materials. Information about materials' nanostructure and bonding is crucial for developing emergent materials, as well as for creating and validating robust, reliable computational models of their performance. The successful candidate must be at the cutting edge of the rapidly advancing field of materials characterization with expertise in electron and ion probes, such as scanning/transmission electron microscopy and focused ion beam methods. The candidate is expected to participate actively in the future development of these characterization techniques and enthusiastically participate in undergraduate and graduate level teaching, in addition to working with other Research Scholars to lead collaborations throughout this statewide materials research cluster.

The evaluation of applications will begin immediately, and it will continue until the position is filled. Complete curriculum vitae can be sent by email to [msesearch@matsceng.ohio-state.edu](mailto:msesearch@matsceng.ohio-state.edu) or sent by mail to:

Prof. Hamish L. Fraser  
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*To build a diverse workforce Ohio State encourages applications from individuals with disabilities, minorities, veterans, and women. EEO/AA employer.*

**POSTDOCTORAL FELLOWSHIPS**  
**Complex Oxide Thin Films Science**  
**Harvard University**



Applications are invited for a postdoctoral position at the School of Engineering and Applied Sciences, Harvard University. The project will be related to complex oxide materials and device physics with potential applications to energy conversion technologies. Prior hands-on experience in one or more areas such as thin film synthesis and electronic transport measurements in complex oxide thin films or nanostructures or photochemically active materials is required. The project will have a strong experimental focus and will encompass both materials science studies such as thin film synthesis of multi-component oxides; physical characterization as well as electronic transport aspects. We are seeking highly motivated candidates with an outstanding academic record and publications. The candidate should have a PhD degree in Physics, Applied Physics, Materials Science, Chemistry, Engineering, or related disciplines.

Applicants should send their CV, list of publications, and contact information of three references to: June Wynn (Electronic Mail: [junewynn@seas.harvard.edu](mailto:junewynn@seas.harvard.edu)). Please include "PDF Application" in the subject line.

*Harvard is an Equal Opportunity/Affirmative Action Employer. We strongly welcome applications from qualified women and minority group members.*

**ASSISTANT PROFESSOR**  
**Mesoscale Materials Modeling**  
**University of North Texas**

The University of North Texas invites applications for a tenure-track assistant professor position in mesoscale materials modeling. An earned doctorate in Materials Science and Engineering, Chemistry, Mechanical Engineering, Physics, or a related field is required, and postdoctoral experience is preferred. See [cascam.unt.edu](http://cascam.unt.edu) for details.

Send CV, research and teaching plans, and names and contact information of three references to Mesoscale Faculty Search Committee, Department of Materials Science and Engineering, University of North Texas, 1155 Union Circle #305310, Denton TX 76203-5017. To receive full consideration applications must be received before **January 31, 2009**.

AA/ADA/EOE

## Positions Available



## POSITIONS AVAILABLE

### Interfacial Chemistry and Engineering Group

### Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL) in Richland, Washington, operated by Battelle for the U.S. Department of Energy, is seeking highly motivated individuals to join its Interfacial Chemistry and Engineering Group within the Fundamental and Computational Sciences Directorate.

#### JOB ID #115254 — LABORATORY FELLOW, LEVEL VI

The successful candidate will be an internationally recognized expert pursuing world-leading research that involves the synthesis and characterization of nanostructured materials and integration of these materials into functional devices. The candidate will lead a team of scientists to champion this evolving area. Activities will be partitioned between organizing and directing a new synthesis task within the Transformational Materials Science Laboratory-Level Initiative and developing and conducting fundamental research on nanostructured materials funded through the OS/BES.

The position requires development of 'bottoms-up' synthesis approaches to derive targeted nano-architected functional materials. Such materials will have major impact to the fields of energy storage and conversion, catalysis, bionanomaterials, and photonics and form the basis for new program development. The position also provides guidance to modeling-directed synthesis approaches that are used to understand molecular ordering at interfaces and concomitant structural evolution. In addition to materials synthesis, the position requires interpretation of structural and chemical analytical information derived from electrochemical and electron and force microscopy measurements and optical techniques.

#### Minimum Requirements

A PhD degree in Materials Science, Inorganic Chemistry, or Physics with expertise in the synthesis, and structural and chemical characterization of nano-architected materials is required, as is at least fifteen years of experience in fundamental research involving studies of nano-materials synthesis. Must have prior experience in leading a multidisciplinary team of scientists, and a demonstrated ability to form global research teams comprised of scientists from other national laboratories, the university system, and industry. Sound writing and oral communication skills are mandatory. Previous experience in both writing fundamental research proposals to external sponsors and demonstrated proposal sales comprises a critical job requirement. International recognition of pioneering research in this area must be demonstrated.

*Note: Placement in a Laboratory Fellow position requires concurrence by a review committee consisting of the hiring manager and associated management chain, the Laboratory Fellow Committee Chair, and a distinguished team consisting of Level 1 managers and selected PNNL laboratory fellows.*

#### JOB ID #115979 — RESEARCH SCIENTISTS AND SENIOR RESEARCH SCIENTISTS (Ranks commensurate with experience)

The successful candidate will participate in or lead materials research involving the synthesis and characterization of designed nanostructured materials and investigating the applications of such materials for energy. The candidate will be a key team member in the Transformational Materials Science Laboratory-Level Initiative and will be developing and conducting fundamental research on nanostructured materials funded through the OS/BES.

The position requires development of 'bottoms-up' synthesis approaches to derive targeted nanocomposites or polymer materials for energy storage and conversion (photovoltaics, batteries or super capacitors, etc.). The selected candidate will develop functional materials by integrating synthesis methods particular to inorganic or polymers chemistry with self-assembly approaches. In addition to materials synthesis, the position requires deep understanding and interpretation of structural and chemical analytical information derived from electrochemical and electron and force microscopy measurements and optical techniques.

#### Minimum Requirements

A PhD degree in Materials Science, Inorganic Chemistry or Physics, or Polymer Chemistry with expertise in the synthesis, and structural and chemical characterization of nano-architected materials is required. Two years experience beyond a PhD degree is preferred. Extensive experience, demonstrated through peer-reviewed publications and presentations, in fundamental research involving hands-on nano-materials synthesis and characterization is required. Must have prior experience working in a multidisciplinary team of scientists, and a demonstrated ability to publish in leading technical journals. Sound writing and oral communication skills are mandatory. Previous experience in writing fundamental research proposals to external sponsors desired.

#### JOB ID #115895 — POSTDOCTORAL RESEARCH ASSOCIATE IN MATERIALS SYNTHESIS

The successful candidate will participate in the synthesis and characterization of designed nanostructured materials and investigating the applications of such materials for energy. The candidate will be a team member in the Transformational Materials Science Laboratory-Level Initiative and other laboratory funded research.

Specifically, the position requires development of 'bottoms-up' synthesis approaches to derive nano-architected functional materials for energy storage and conversion (photovoltaics, batteries or supercapacitors, etc). The selected candidate will develop functional materials with self-assembly approaches. In addition to materials synthesis, the position requires understanding and interpretation of structural and chemical analytical information derived from electrochemical and electron and force microscopy measurements and optical techniques.

#### Minimum Requirements

A PhD degree in Materials Science, Inorganic Chemistry or Physics, or Polymer Chemistry with expertise in the synthesis, and structural and chemical characterization of nano-architected materials is required. Extensive experience, demonstrated through peer-reviewed publications and presentations, in hands-on nano-materials synthesis and characterization is required. Must have prior experience working in a multidisciplinary team of scientists, and a demonstrated ability to publish in leading technical journals. Sound writing and oral communication skills are required.

*To apply on-line, go to [www.jobs.pnl.gov](http://www.jobs.pnl.gov) and reference the Job ID listed. For more information about the laboratory, visit our website [www.pnl.gov](http://www.pnl.gov).*