



## PRECEPTOR IN APPLIED PHYSICS

### School of Engineering and Applied Sciences

#### Harvard University

The Harvard School of Engineering and Applied Sciences (SEAS) seeks applicants for the position of Preceptor in Applied Physics, with a preferred start date of February 1, 2012. The Preceptor will be primarily responsible for the coordination and support of a new course, AP50: Physics as a foundation for Science and Engineering, to be offered beginning in the Fall of 2012. The initial position is for an eighteen-month, academic appointment, renewable for up to five or more years, depending on continuing curricular need and performance. Involvement with other SEAS courses may evolve after a year or so, as AP50 becomes well established.

#### Responsibilities include:

- **Course design:** Work with (and report to) the faculty members who are the principal course instructors to define the learning goals for the course, design projects, prepare course activities and materials, and devise an assessment strategy.
- **Course management:** Assist with teaching as necessary; hire, train, and supervise teaching assistants, including leading TF meetings; and hold office hours for students.
- **Course administration:** Maintain course grade and attendance records, including contacting resident deans and the registrar's office as needed; supervise website development and maintenance, and act as a liaison to the Academic Technology Group; and coordinate with visiting lecturers, including managing their itineraries during campus visits.

An advanced degree in physics, engineering, or a related field is required; PhD preferred. Expertise in science education research, and experience in project-based learning and course design strongly desired. Superior organizational, written, and interpersonal communication skills are necessary, along with the ability to lead and train teaching fellows and to manage relationships with undergraduate students.

Applicants will apply online at <http://academicpositions.harvard.edu/postings/3862>. Required documents include a cover letter, CV, a teaching statement, and names and contact information for at least three references. Priority will be given to applications submitted by January 15, 2012, but they will be accepted until the position is filled.

Harvard University is an Equal Opportunity/Affirmative Action employer and applications from women and underrepresented minorities are strongly encouraged.



## ENDOWED TENURE-TRACK PROFESSORSHIPS

### Materials Science and Engineering

The Materials Science & Engineering Department (<http://mse.mst.edu/>) of Missouri University of Science and Technology (formerly University of Missouri-Rolla) is seeking two highly qualified applicants for tenure-track assistant professorships. Exceptional candidates may be considered for tenure-track positions at the associate professor or full professor level. Each position will be supported with competitive salary, start-up package, and endowed funds that provide research support during the candidate's tenure-track appointment. Successful candidates are expected to contribute to the overall materials research mission of the department with emphasis in any of the following areas: physical metallurgy, mechanical behavior of materials, materials characterization, sustainable manufacturing technology, computational materials science, modeling of materials behavior, or modeling of materials processes. Collaborative and interdisciplinary research through the Graduate Center for Materials Research (<http://mrc.mst.edu/>) or the Intelligent Systems Center (<http://isc.mst.edu/>) will be encouraged.

Applicants are expected to have earned a doctoral degree in metallurgical engineering or in a materials science-related field. Postdoctoral research and teaching experience in materials science and engineering are highly desirable. The successful applicants will be expected to develop a self-sustaining, extramurally funded and internationally acclaimed research program and contribute to the overall teaching mission of the department with an emphasis in the metallurgical engineering program.

Sponsored research expenditures of the MSE department are over \$6.5M per year. The MSE department maintains degree programs in metallurgical engineering, ceramic engineering, and materials science and engineering. Our metallurgical engineering program is one of the largest and most respected in the US. The department has 18 full-time faculty and 200 undergraduate students and 65 graduate students.

Applications must be electronically submitted to the Missouri University of Science and Technology's Human Resource Office using the following address: [hrsinfo@mst.edu](mailto:hrsinfo@mst.edu). Please include the **reference number 00030919** in the subject line of the corresponding e-mail. Candidates should submit a curriculum vitae, a statement of research and teaching accomplishments and plans, and names and contact information of at least four professional references. Acceptable electronic formats that can be used include PDF and Word. Review of applications will begin **March 1, 2012**, and will continue until the positions are filled.

Missouri S&T participates in E-Verify. For more information on E-Verify, please contact DHS at 1-888-464-4218.

The final candidate is required to provide official transcript(s) for any college degree(s) listed in application materials submitted. Copies of transcript(s) must be provided prior to the start of employment. In addition, the final candidate may be required to verify other credentials listed in application materials. Failure to provide official transcript(s) or other required verification may result in the withdrawal of the job offer.

Missouri S&T is an Affirmative Action/Equal Opportunity Employer and does not discriminate based on race, color, religion, sex, sexual orientation, national origin, age, disability, or status as a Vietnam-era veteran. Females, minorities, and persons with disabilities are encouraged to apply.



## Tenure-Track Faculty Position Materials Science and Engineering

McMaster  
University



The Department of Materials Science and Engineering at McMaster University invites applications for a tenure-track faculty position. The appointment is intended to be at the Assistant or Associate Professor level; however, consideration will also be given to exceptional candidates at the Full Professor level. It is important to note that the search will not be limited to a specific sub-discipline within the field and **qualified candidates with research expertise in any area of materials science and engineering, traditional or emerging, will be considered.**

McMaster University, one of the Top 100 universities in the world (THE and AWRU rankings of world universities), boasts a network of academic institutes that provide stimulating interdisciplinary research opportunities, such as the Canadian Centre for Electron Microscopy, the Brockhouse Institute for Materials Research, the Centre for Automotive Materials and Corrosion, and the Steel Research Centre. For more information on the experimental facilities and current research interests of the department the applicant is invited to visit our website at [mse.mcmaster.ca](http://mse.mcmaster.ca).

Applicants must have earned a PhD degree in Materials Science/Engineering, Physics, Chemistry, or a closely related discipline. The successful applicant will be expected to develop a strong, externally funded research program and demonstrate a commitment to teaching and curriculum development at both the undergraduate and graduate levels. Within a reasonable time period after joining the department, the successful candidate is expected to obtain a full or limited license with the Professional Engineers of Ontario.

Applications will be accepted until **April 1, 2012** and the anticipated starting date for the position is January 1, 2013. Applications by e-mail are encouraged.

All qualified applicants are encouraged to apply; however, Canadian Citizens and permanent residents will be given priority. McMaster University is strongly committed to employment equity within the community, and to recruiting a diverse faculty and staff. The University welcomes applications from all qualified applicants, including women, members of visible minorities, Aboriginal persons, members of sexual minorities, and persons with disabilities.

Interested applicants should send a letter of application, curriculum vitae, statements of teaching and research interests, a selection of research publications, and the names and addresses of at least three references to:

Faculty Selection Committee  
Department of Materials Science and Engineering, McMaster University  
1280 Main St. West, JHE 357, Hamilton, Ontario, L8S 4L7, Canada  
Email: [matsci@mcmaster.ca](mailto:matsci@mcmaster.ca)  
Reference: MATERIALS 2012

## ASSISTANT PROFESSOR Materials Engineering

Tulane University invites applications for a tenure-track Assistant Professor in materials engineering in the Department of Physics & Engineering Physics. Preference will be given to experimental applicants who have outstanding research records in materials engineering and who fit well into the goals and activities of our department. Our goal is to develop excellence through integrating materials engineering and physics. Our preferred areas of interest include, but are not limited to, devices related to novel materials, polymers, energy materials, and/or biological materials and devices. We are also committed to interdisciplinary research and teaching with other faculty in our School of Science and Engineering as well as the School of Medicine, and the other Schools at Tulane. The new faculty member will have the opportunity to participate in an anticipated expansion of the materials engineering and science effort at Tulane.

Applicants must possess a doctoral degree in engineering and a commitment to teaching. The position will include a competitive salary and startup package. Applicants should submit a cover letter, CV, a research plan, and contact information for three references to: Assistant Professor Search, Department of Physics and Engineering Physics, Tulane University, New Orleans, LA 70118. For full consideration, applications should be submitted on or before **February 29, 2012**. Further information can be found at [tulane.edu/sse/pep](http://tulane.edu/sse/pep). Women and underrepresented minorities are strongly encouraged to apply. Tulane is committed to providing a family friendly workplace, including child care and access to good K-12 schools. Tulane has multiple ties to the diverse, culturally rich community of New Orleans. Inquiries can be directed to [engineeringphysics@tulane.edu](mailto:engineeringphysics@tulane.edu). This search is pending budgetary approval.

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



## Tenure-Track Faculty Position College of Engineering



The Departments of Mechanical/Industrial Engineering and Electrical and Computer Engineering at Northeastern University invite applications and nominations for a joint tenure-track faculty position beginning in September 2012 at the Assistant or Associate Professor level. Applicants at the senior level with well-established, well-funded, and internationally recognized research programs will also be considered. Candidates are sought to expand the Department's research efforts in the emerging area of nanoscale devices including but not limited to nanomaterial based devices such as molecular/NEMS, nanowires, nanoparticle, or nanotube/graphene-based electronics and nanophotonics.

**Qualifications:** a doctorate in mechanical engineering, electrical engineering, physics, or a closely related field is required. Excellence in teaching is expected.

The Mechanical and Industrial Engineering Department at Northeastern is a large and growing academic enterprise comprising 37 full-time faculty with \$10 million in annual research funding, approximately 100 PhD students, 400 MS students, and a total combined graduate/undergraduate student population of over 1,300. The Electrical and Computer Engineering Department at Northeastern University has 47 faculty members, 260 PhD students, 270 MS students and more than 400 undergraduate students. The ECE Department has established areas of excellence in sensing and imaging, communications and digital signal processing, integrated circuits design, power and control systems, power electronics, RF/microwave magnetic and multiferroic materials and device technologies. The College of Engineering is home to three federally funded research centers, including the NSF Nanoscale Science and Engineering Center for high-rate Nanomanufacturing. At the core of the Northeastern engineering education experience is our top ranked cooperative education program which contributes significantly to the integrated learning model in use in the College of Engineering. Northeastern University has an excellent 7,000 square foot class 10/100/1000 micro/nanofabrication facility available to faculty, the Kostas Center ([www.kostas.neu.edu/](http://www.kostas.neu.edu/)).

**Please visit the College of Engineering website [www.coe.neu.edu](http://www.coe.neu.edu) and click on "Faculty Positions."** Applications should include a cover letter, a statement of current and future research interests, curriculum vitae, and contact information for at least three references. Applications will be reviewed until the position is filled. For more information contact Professor Ahmed Busnaina ([busnaina@neu.edu](mailto:busnaina@neu.edu))

Northeastern is an urban university in Boston located among the nation's best hospitals, world renowned research institutions, and historical arts and music landmarks of the city. Northeastern University is a national leader in cooperative education and recently has enjoyed an unprecedented rise in the National Research University rankings in *US News and World Report*. Northeastern is also the recipient of an NSF-funded ADVANCE grant for promoting the careers of women in engineering and science. The university is currently expanding with plans to add 150 faculty to the current pool of talented full-time scholars.

### Equal Employment Opportunity:

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern University particularly welcomes applications from minorities, women and persons with disabilities. Northeastern University is an E-Verify Employer.



Northeastern University

<http://www.neu.edu>



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For additional information, visit [www.mrs.org/spring2012](http://www.mrs.org/spring2012)



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## Materials Researcher

Rocky Research, an engineering firm specializing in applied thermodynamics and thermal and electronic appliances, is interested in expanding its core competency into select fields of materials science. The company's facility in Boulder City, Nevada, is seeking indications of interest to fill a new position in materials research.

Rocky Research is a small business concern with emphasis on research & development, HVAC fluid analysis, and specialty product manufacturing for U.S. military and commercial niche markets. More information on Rocky Research can be found at [www.rockyresearch.com](http://www.rockyresearch.com).

The person sought is expected to develop creative materials concepts that have intrinsic value and complement existing activities at Rocky Research. The specific materials science areas of interest are:

- Thermo-physical Properties
- Direct Energy Conversion
- Advanced Composite Systems

Qualifications include a PhD degree in engineering or equivalent with demonstrated experience in new materials development. U.S. citizenship required.

Interested parties should submit a summary of their experience in research, in preparation of successful proposals to secure funding, and their record of publications and significant peer recognition and awards to [humanresources@rockyresearch.com](mailto:humanresources@rockyresearch.com).



## Assistant/Associate/Full Professor

Stony Brook University Department of Materials Science and Engineering in the College of Engineering and Applied Sciences invites applications for a tenure-track faculty position at the Assistant/Associate/Full Professor level. **Required:** A Ph.D. in Materials Science or related field is required with experience in thermal spray coatings or related field of materials processing and synthesis. Research in the Department currently includes thermal spray science, polymer interfaces, surface science, crystal growth and characterization, advanced fuels, environmental remediation, sustainable materials, and sensors. In addition to pursuing excellence in undergraduate and graduate teaching (the Department administers undergraduate programs in Engineering Science and Chemical and Molecular Engineering as well as a graduate program in Materials Science and Engineering), the ability to initiate both independent and collaborative research programs and interact with industry is of importance. Consideration of applicants will begin January 24, 2012, but the search will remain open until the position is filled.

**For a full position description and/or application procedures, visit [www.stonybrook.edu/jobs](http://www.stonybrook.edu/jobs) (Job Reference #: F-7088-11-12). To apply, submit a State employment application, curriculum vitae, a research plan (maximum three pages), a statement of teaching philosophy, at least three pertinent reprints, and the names of at least three references to:**

Ms. Chandrani Roy, Assistant/Associate/Full Professor (7088) Search Department of Materials Science and Engineering  
Old Engineering Building, Room 314  
Stony Brook University  
Stony Brook, NY 11794-2275



Stony Brook University/SUNY is an equal opportunity, affirmative action employer.



## IIT Armour College of Engineering

ILLINOIS INSTITUTE OF TECHNOLOGY

### FACULTY POSITIONS

#### Department of Mechanical, Materials, and Aerospace Engineering (MMAE)

Applications are invited for multiple tenure-track faculty positions at the assistant or associate professor level. Exceptional candidates at the professor level may also be considered. Candidates should have interdisciplinary research interests contributing to the department's areas of strategic research emphasis: (1) sustainable energy systems, (2) health applications of bio-fluid dynamics, (3) smart transportation and mobility systems, (4) energy-efficient manufacturing through thermal and thermally-assisted processes, or other research areas that enable strong interdisciplinary collaborations.

Candidates must have an earned doctoral degree in engineering or physical science, and be capable of developing an externally funded research program that supports graduate students and provides a record of published research. Candidates are expected to be highly effective teachers for undergraduate and graduate courses.

The MMAE department at IIT offers ABET accredited bachelor's, master's, and doctoral degrees in mechanical engineering, aerospace engineering, and materials science and engineering. IIT is a private PhD-granting research university, with world-renowned programs in engineering, architecture, the sciences, humanities, psychology, business, law, and design. The University's Main Campus is located three miles from downtown Chicago.

For full application requirements and more information, visit [www.iit.edu/engineering/mmae](http://www.iit.edu/engineering/mmae). Application review begins December 1, 2011.

*IIT is an Equal Opportunity and Affirmative Action Employer.*



### Senior Engineer Composite Materials GE Global Research

The Material Mechanics Lab at GE Global Research, Bangalore, conducts advanced research in the area of Composite Materials. The lab's focus is to accelerate the implementation of polymer and ceramic matrix composites in GE businesses through process and mechanics modeling supported by specialized testing. It works closely with the teams in Niskayuna and Munich to support projects for GE-Energy, Aviation, SABIC, Medical Systems, Water, and Oil & Gas.

We are looking for candidates with a PhD degree in Mechanical Engineering/Materials Science, a strong background in mechanics of composite materials, and who have over ten years of experience in the industry or academia.

Reach out to us at [Bangalore.Globalresearch@ge.com](mailto:Bangalore.Globalresearch@ge.com) for more details. The details of **Job 1282757** is available at [www.ge.com/careers](http://www.ge.com/careers).

## Faculty Positions

### Materials Science and Engineering



The Department of Materials Science & Engineering (MSE) at Boise State University plans to hire three tenure-track faculty by fall 2012 to help grow its undergraduate and graduate programs. Hires will be made at the Assistant, Associate, or Full Professor level. A doctoral degree in MSE, or a closely related field, is required. Successful candidates will be expected to be highly collaborative, contribute significantly to both graduate and undergraduate research, and make balanced contributions to teaching, research, and service.

Faculty are being sought who have expertise that support or are complimentary to strategic research areas of the department and university (<http://coen.boisestate.edu/mse/>).

With approximately 20,000 students, Boise State is the largest university in Idaho and is home to a thriving and energetic new MSE program. The College of Engineering is experiencing tremendous growth and enjoys support from the intermountain west's high-tech industry. Boise offers convenient access to outdoor recreation, including world-class whitewater, skiing, biking, fishing, and camping.

Review of applications will begin **March 15, 2012** and will continue until the position is filled. Interested applicants should submit cover letter, CV, statements of teaching and research interests, and a list of three references to [MSearch@boisestate.edu](mailto:MSearch@boisestate.edu).

Additional details available at <http://coen.boisestate.edu/mse/Opportunities/>.

*EEO/AA Institution; Veterans preference may be applicable.*





## PROFESSOR OF METALLOGRAPHY

A tenure position for the Chair of Metallography is vacant at the Montanuniversitaet Leoben, Austria (permanent, full-time employment). The successful candidate is expected to lead both the research and teaching activities in the field of metallography. The focus of research should be set on the chemical and structural analysis of nanostructures and crystal boundary interfaces in materials. The University has a particular interest in considering material science applications from both a theoretical and experimental point of view.

The ideal candidate is an internationally recognized researcher with comprehensive expertise in spatially resolved characterization techniques. The candidate will be responsible to lecture in several study courses, as well as to supervise and evaluate academic theses. The willingness and ability to cooperate with other research groups and with industry is expected. Requirements for the appointment as professor are an internationally recognized degree and doctorate in an appropriate field. Additional prerequisites are a habilitation or an equivalent research qualification, didactic and pedagogic abilities, management skills, as well as fluency in both German and English. For the full-text version of this advertisement see the homepage of the Montanuniversitaet Leoben at [www.unileoben.ac.at](http://www.unileoben.ac.at).

Candidates are expected to submit their application with supporting documents (curriculum vitae, relevant certificates, list of publications, list of previous research projects, statement of teaching experience, short presentation of previous research activity) and with copies of the most important five publications. The application should be submitted fivefold (CD-ROM) before **March 15, 2012**, to:

The Rector of the Montanuniversitaet Leoben  
Univ.-Prof. Dipl.-Ing. Dr. Wilfried Eichlseder  
Franz-Josef-Straße 18  
A-8700 Leoben, Austria

For further information please contact the chairman of the Search Committee, Prof. Dr. Wolfgang Kern, Franz-Josef-Straße 18, A-8700 Leoben; Tel: +43 3842 402-2350; E-mail: [wolfgang.kern@unileoben.ac.at](mailto:wolfgang.kern@unileoben.ac.at); [www.unileoben.ac.at](http://www.unileoben.ac.at).

*The Montanuniversitaet Leoben is an equal opportunity employer and women are particularly encouraged to apply for this position.*



ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE

## Faculty Position in Materials Science and Engineering at the Ecole polytechnique fédérale de Lausanne (EPFL)

The School of Engineering of EPFL invites applications from candidates for the position of **tenure-track assistant professor** within its Institute of Materials. We seek exceptional individuals who will develop and drive a research program at the forefront of the discipline, who have a strong dedication to teaching at the undergraduate and graduate levels, and who will be proactive members of a vibrant Materials community.

Top-level applicants in those areas of Materials Science and Engineering that are concerned, in a broad sense, with the following topics are of particular interest:

- (i) electrochemistry as applied to the processing, microstructural tailoring or performance of materials,
- (ii) the processing, microstructural tailoring, characterization or performance of materials having surface functionality, and
- (iii) modeling and simulation as relevant to the processing, microstructural development and performance of materials.

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

The EPFL, located in Lausanne, Switzerland, is a dynamically growing and well-funded institution fostering excellence and diversity. It has a highly international campus at an exceptionally attractive location

boasting first-class infrastructure. As a technical university covering essentially the entire palette of engineering and science, EPFL offers a fertile environment for research cooperation between different disciplines. The EPFL environment is multi-lingual and multi-cultural, with English often serving as a common interface.

Applications should include a cover letter with a statement of motivation, curriculum vitae, list of publications and patents, concise statement of research and teaching interests, and the names and addresses of at least five referees. Applications must be uploaded in PDF format to the recruitment web site: [imx-search12.epfl.ch](http://imx-search12.epfl.ch)

Formal evaluation of candidates will begin on **1 March 2012**.

Enquiries may be addressed to:  
**Prof. Andreas Mortensen**  
Search Chairman  
e-mail: [imx-search@epfl.ch](mailto:imx-search@epfl.ch)

For additional information on EPFL, please consult the web sites: [www.epfl.ch](http://www.epfl.ch), [sti.epfl.ch](http://sti.epfl.ch) and [imx.epfl.ch](http://imx.epfl.ch).

*EPFL is committed to increasing the diversity of its faculty, and strongly encourages women to apply.*