





## **FACULTY POSITIONS: MATERIALS SCIENCE AND ENGINEERING**

The Materials Science and Engineering Program in the Physical Sciences and Engineering Division at King Abdullah University of Science and Technology (KAUST) invites applications for faculty positions at all ranks (Assistant, Associate, and Full Professors).

KAUST is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities, generous assured research funding, and internationally competitive salaries. The university attracts top international faculty, scientists, engineers, and students to conduct fundamental and goal-oriented research to address the world's pressing scientific and technological challenges related to the sustainability of water, food, energy, and the environment.

The Materials Science and Engineering (MSE) Program at KAUST currently has eight full-time faculty members researching in the areas of: materials for nanotechnology, inorganic/organic electronics and alternative energy, materials synthesis, advanced characterization and computational methods, device fabrication and characterization, and related areas, These areas are enhanced by strong support from KAUST's international research collaboration networks, and advanced central research facilities including Nanofabrication, Imaging, and Characterization; Analytical Chemistry; Supercomputing; and Scientific Visualization.

More information about the MSE program and research activities is available at: http://mse.kaust.edu.sa.

As part of the expansion of the MSE Program, we invite applications from exceptional candidates for faculty positions at all ranks and in all areas of Materials Science.

Priority will be given to candidates with research interests in the following areas:

- Biomaterials
- Materials for Nanotechnology
- Inorganic/Organic Electronics
- Alternative Energy
- · Materials Synthesis
- Advanced Characterization and Computational Methods
- Device Fabrication and Characterization

Applicants should have a proven track record, relevant PhD degree, as well as the ability to establish a high impact research program and demonstrate commitment to teaching at the graduate level.

Applicants should apply at http://apptrkr.com/307871. Applications received by January 31, 2013 will receive full consideration and positions will remain open until filled.





# **SCIENTIST**

**Electronic Materials Branch Naval Research Laboratory** 

The Electronic Materials Branch at the Naval Research Laboratory in Washington, DC seeks, for a full-time position, an exceptional scientist with a background and demonstrated record of productivity in experimental surface science. A successful candidate will have experience in one or more of the following areas: UHV techniques, methods and practice; electron-spectroscopic techniques such as Auger, XPS, UPS, etc.; vibrational spectroscopy of surface species; surface chemical reactions of relevance to materials growth and processing; electronic structure and properties of semiconductor surfaces; computational modeling of surface properties and reactions; and vapor-solid and liquid-solid interfaces in non-UHV environments.

Applicants should have the skills needed to initiate a strong independent research program as well as to contribute to existing programs in a group environment. Depending on experience we will consider applicants presently at any level from postdoctoral to senior scientist. It is preferred that candidates have a PhD degree in science or engineering. A CV, a one page statement of your research interests, and three letters of recommendation should be sent to surface-scientist-6870@nrl.navy.mil. Applications will be accepted on a continuing basis until the positions are filled.

NRL operates as the Navy's full-spectrum corporate laboratory, conducting a broadly based multidisciplinary program of scientific research and advanced  $\,$ technological development.

The Naval Research Laboratory is an Equal Opportunity Employer



### Chair Professor/Professor/ Associate Professor/Assistant Professor Department of Physics and Materials Science [Ref. A/101/22]

The Department of Physics and Materials Science is one of the nine academic units in the College of Science and Engineering. It was formed in 1993 as the first of its kind in Hong Kong, and already excels in several fields with internationally recognized experimental and theoretical experts embracing advanced fields which address the world's most pressing challenges with science and technology. The Department is entering a phase of major expansion. It currently employs 27 full time academic faculties. Over the next few years, the Department will recruit 10 more faculty members, bringing the total number to 37 Further information about the Department can be found at http://www.ap.cityu.edu.hk.

Applications are invited from different areas of applied physics and materials sciences

Requirements: A PhD in Physics/Materials Science or related disciplines with a strong research record and promising teaching ability. Postdoctoral experience is essential. Preference will be given to candidates with strong research and teaching experience in materials physics, and background in computational materials physics, computational materials science, and neutron or synchrotron scattering. The candidates are expected to develop new research directions and courses

The level of appointment will be commensurate with the qualifications of the candidates

Salary and Conditions of Service: Remuneration package will be driven by market competitiveness and individual performance. Excellent fringe benefits include gratuity, leave, medical and dental schemes, and relocation assistance (where applicable). Initial appointment will be made on a fixed-term contract.

Information and Application: Further information on the posts and the University is available at http://www.cityu.edu.hk or from the Human Resources Office, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong [Fax: (852) 2788 1154 or (852) 3442 0311/email: hrojob@cityu.edu.hk]. Please send the nomination or application enclosing a current CV with evidence of teaching ability in English, and a application entouring a cultimeter of which entouring philosophy (up to 2 pages each) to aphead@cityu.edu.hk. Applications and nominations will receive full consideration until the positions are filled. Shortlisted candidates for the post of Assistant Professor will be requested to arrange for at least 3 reference reports sent directly by the referees to the Department, specifying the position applied for. The University reserves the right not to fill the positions. Personal data provided by applicants will be used strictly in accordance with the University's personal data policy, a copy of which will be provided upon request.

City University of Hong Kong is an equal opportunity employer and we are committed to the principle of diversity. We encourage applications from all qualified candidates, especially those who will enhance the diversity of our staff.



## PROFESSOR AND CHAIR

**Division/College: College of Engineering** 

• Requisition Number: FTFR000256 • FT/PT: Full Time • Grade: FAC

Position Summary: The Mechanical and Industrial Engineering Department (www. mie.neu.edu) at Northeastern University is a successful and vibrant academic enterprise which is growing in both size and stature. The department comprises 41 full-time faculty with \$10 million in annual research funding, 100 Ph.D. students, 300 MS students, and a total combined graduate/undergraduate student population of over 1500. At the core of the Northeastern engineering education experience is our top-ranked cooperative education program which contributes significantly to the integrated learning model of the College of Engineering. In addition, the Mechanical and Industrial Engineering Department is home to the University-wide Healthcare Systems Engineering Institute and five federally-funded research centers (of the eight federal centers in the College of Engineering): 1) The NSF Nanoscale Science and Engineering Center (NSEC) for High-rate Nanomanufacturing, 2) The NSF Center for Health Organization Transformation, 3) The NSF Center for Microcontamination Control, 4) The Veterans Affairs Engineering Research Center, and 5) The CMS Innovation Center for Healthcare Systems Engineering. Given recently announced plans to dramatically expand the number of faculty hires across the University, the next Chair of MIE has a unique opportunity to significantly impact the direction and trajectory of an already strong, vibrant department. Northeastern University also has a 7,000 square foot class 10/100/1000 micro/nanofabrication facility available to faculty, the Kostas Center (http://www.kostas.neu.edu/), and has recently opened the 70,000 square foot Kostas Research Institute for Homeland Security at our Burlington campus.

Applicants are expected to have demonstrated strategic vision in their research enterprises which should be well-established, well-funded and internationally recognized. Successful candidates will also have demonstrated excellence and have significant experience in teaching at both the undergraduate and graduate level.

Candidates are required to have a PhD in Mechanical Engineering, Industrial Engineering or a closely related field. Research, teaching or collaborative experience that spans mechanical and industrial engineering fields is beneficial. Previous experience managing a large federally-funded research group or center is desirable.

## **Additional Information:**

Northeastern is an urban university in Boston, located among the nation's best hospitals, world renowned research and teaching 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

Applicants should submit a detailed Curriculum Vitae, three professional references and a strategic vision statement. For more information contact Prof. Ahmed A. Busnaina, busnaina@neu.edu. Nominations for the position should be sent to the address provided below or emailed directly to busnaina@neu.edu. The target starting date is July 1, 2013, but the position will remain open until filled.

MIE Chair Faculty Recruitment Committee Department of Mechanical and Industrial Engineering 334 Snell Engineering Center Northeastern University 360 Huntington Avenue Boston, MA 02115-5000 Code: NFI I638

To be considered for this position please visit our web site and apply on line at the following link: http://apptrkr.com/310203

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.





## Excellence in Science & Technology

## **MATERIALS SCIENTIST**

UES, Inc. is seeking applicants to fill a Materials Scientist position with a PhD level qualification. The successful candidate will be working at Wright Patterson Air Force Base in collaboration with government scientists on projects that relate processing conditions to microstructures and properties of nickel and titanium based alloys. The job will primarily involve modeling/simulation work. Knowledge and/or experience with microstructure representation, CPFEM, and DEFORM modeling tools is highly desirable.

Applicants with a PhD in materials science or related discipline with appropriate skill sets and aptitude are encouraged to apply with a resume and three references. To apply, visit our Careers page at www.ues.com.

US Citizenship/Permanent Residency required.

### HUMBOLDT-UNIVERSITÄT ZU BERLIN



The Faculty of Mathematics and Natural Sciences I of Humboldt-Universität zu Berlin (HU), Departments for Chemistry and Physics invite applications for the following joint position, starting 01.10.2013:

## Full Professorship in "Hybrid Devices - Hybride Bauelemente"

The professorship's research should focus on the development of concepts for synthesizing and processing electronically and opto-electronically active inorganic/organic hybrid materials. On the basis of these materials, respective device architectures should be developed and their attainable functional features be evaluated, also from the perspective of resource-efficient production. The professorship is part of the Integrative Research Institute for the Sciences (IRIS) Adlershof – one of the core elements of Humboldt-Universität's strategy to foster interdisciplinary cutting-edge research within the German Excellence

Applicants must meet the legal requirements for appointments of professors in accordance with § 100 of the "Berliner Hochschulgesetz".

HU seeks to increase the proportion of women in research and teaching, and specifically encourages qualified female researchers to apply. Applications of researchers from abroad are welcome. Preference will be given to disabled persons with equal qualifications. Applicants with migration background are highly welcome.

Applications (including reprints of 5 key publications, statements on current and future research and teaching interests) should be sent by February 28, 2013 to Humboldt-Universität zu Berlin, Dekan der Mathematisch-Naturwissenschaftlichen Fakultät I, Prof. Hecht, Unter den Linden 6, 10099 Berlin, Germany stating the reference number PR/001/13. Since application materials will not be returned, we ask you to send only copies of all documents.

To accelerate the process, please submit your application also in electronic form at https://www2.physik.hu-berlin.de/ssl/hybrbe/.

## **FACULTY POSITIONS**

Department of Mechanical Engineering and Materials Science

The Department of Mechanical Engineering and Materials Science (MEMS) at the University of Pittsburgh (Pitt) invites applications for two tenure -track positions in Materials Science and Engineering (MSE). Successful applicants are expected to build an externally funded research program which contributes to the existing strengths of our program while enhancing strategic areas targeted for future growth, such as advanced processing with particular focus on additive manufacturing and energy, applications. Applicants should also have a sound background for and dedication to teaching undergraduate and graduate courses in the Materials Science and Engineering programs. Accordingly, applicants should have a PhD degree in Materials Science & Engineering or a related field, and a demonstrated commitment to excellence in teaching and research. While the position is primarily for the junior rank, applicants with outstanding track records of higher ranks will also be considered. Although, preference will be given to applicants whose research focus is Physical Materials (Physical Metallurgy, Physical Ceramics), exceptional candidates in our strategic areas of growth are encouraged to apply.

The Department of Mechanical Engineering and Materials Science, formed by a merger of the departments of Mechanical Engineering and Materials Science and Engineering in 2006, has 28 tenured or tenure-track faculty members who generate nearly \$7 million in annual research expenditures. Current research thrusts include high temperature materials, materials processing, computational mechanics and fluid dynamics, computational materials science, material characterization at multiple length scales, energy technologies, smart materials and structures, functional nanomaterials, micro/biofluidics, biomaterials, advanced ceramics, smart structures, and biomechanics,

The successful candidates for this position will especially benefit from the resources, support, and multidisciplinary research environment fostered by the University of Pittsburgh's Center for Simulation and Modeling (http://www.sam.pitt.edu), the Pittsburgh Supercomputing Center (http://www.psc.edu), and the Center for Energy (http://www.energy.pitt.edu). The Petersen Institute of NanoScience and Engineering's (http://www.nano.pitt.edu) Nanoscale Fabrication and Characterization Facility houses state-of-the-art transmission electron microscopy, dual beam FIB, dedicated E-beam lithography, SEM, EPMA, FTIR, SPM, XRD, UV-Vis-IR spectrophotometer, and clean-room facilities.

Qualified applicants are strongly encouraged to submit their application electronically to pitt-mems-search@engr.pitt.edu. Applications should include the following materials in pdf form: a curriculum vitae, a statement of research interests and teaching philosophy, and a list of at least three references. Application can also be submitted by mail to Chair(MSE Faculty Search), Department of Mechanical Engineering and Materials Science, 636 Benedum Hall, Swanson School of Engineering, University of Pittsburgh, Pittsburgh, PA 15261. Review of applications will begin on January 2, 2013, and continue until the positions are filled.

Women and minorities are strongly encouraged to apply. The University of Pittsburgh is an equal opportunity/affirmative action employer.





# **FACULTY POSITIONS: CHEMICAL AND BIOLOGICAL ENGINEERING**



The Chemical and Biological Engineering Program in the Physical Sciences and Engineering Division at King Abdullah University of Science and Technology (KAUST) invites applications for faculty positions at all ranks (Assistant, Associate, and Full Professors).

King Abdullah University of Science and Technology (KAUST) is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities, generous assured research funding, and internationally competitive salaries. The university attracts top international faculty, scientists, engineers, and students to conduct fundamental and goal-oriented research to address the world's pressing scientific and technological challenges related to the sustainability of water, food, energy, and the environment.

The Physical Sciences and Engineering Division (PSE) encompasses five core disciplines: Chemical and Biological Engineering; Chemical Science; Earth Science and Engineering; Materials Science and Engineering; and Mechanical Engineering. The science produced in PSE is about understanding, modeling, and manipulating matter at all scales: nano, meso, and macroscopic levels; in all forms: bulk, thin films, divided colloids, fluid flows, earth as system etc.; and in interaction with external stimuli: light, heat, fluids, or stresses. Find more information about PSE at http://pse.kaust.edu.sa.

The Chemical and Biological Engineering Program offers opportunities to develop real-world solutions to global challenges. These include the development of new membranes for gas and liquid separations, as well as new materials for reducing greenhouse gases and remediating chemical and biological threats. Alternative and renewable energy processes, and new methods for carbon dioxide utilization all contribute to the overall research mission of KAUST.

The Chemical and Biological Engineering program is currently recruiting for the following positions:

· Process Modeling and Design

The candidate should be able to conduct design, optimization, and cost analysis of membrane and conventional separation processes and conduct teaching of advanced principles of process design and control.

· Petroleum and Natural Gas Engineering

The candidate must have strong knowledge of the petroleum and/or natural gas industry and build a bridge between KAUST and Saudi Arabia's fast growing petroleum industry.

· Biomolecular Engineering

The candidate should have a well-established research career in bioprocess engineering or biomedical engineering.

· Nanotechnolgy for Sustainable Energy

A strong research background in areas such as development of nanostructured materials and processes for energy conversion or catalysis with improved efficiency and/or reduced cost is required.

All candidates should build an independent high-impact research program and demonstrate capability of working across broad interdisciplinary areas. Senior applicants must have a proven record of high-impact research, been published in premier journals, as well as have strong teaching and student mentoring experience.





## Senior Faculty Position • Materials Science and Engineering

The School of Mechanical and Materials Engineering (MME) at Washington State University on the Pullman campus invites applications for a senior level tenure-track faculty position in the broad areas of materials science and engineering. This faculty hire is expected to catalyze large-team research in Materials Science and Engineering at WSU. WSU envisions large research groups built around this position, with supporting faculty, postdoctoral researchers, and students. The successful candidate will also be expected to teach undergraduate and graduate courses in materials science and engineering and mentor students. Appointment will be at the Associate or Full Professor rank.

#### Qualifications

An earned doctoral degree in Mechanical or Materials Engineering or a closely related field is required prior to the start of the appointment. An individual with proven commitments to innovative programs in interdisciplinary research, and the advancement of undergraduate and graduate education to a diverse student body is desired. The candidate should have demonstrated ability to cultivate relationships that benefit teaching, research, and outreach programs. The successful candidate must have exceptional communication and interpersonal skills. Salary is negotiable, commensurate with qualifications and experience.

#### **Application**

An application should include a letter describing relevant experiences and interest in the position; a resume; a statement of leadership vision, research plans, teaching experience, and interests; and the names of five references with titles, addresses, business telephone numbers, and e-mail addresses. References will not be contacted without consent from applicants. The application should be submitted online at www.wsujobs.com/applicants/Central?quickFind=57891. Application review begins immediately and will continue until the position is filled. It is anticipated that the successful candidate will begin the appointment on or before August 16, 2013. For additional information on Washington State University and MME, visit our home page at http://www.mme.wsu.edu.

WSU is an EO/AA Educator and Employer.



## Lecturer in Materials Engineering

## Department of Chemical and Materials Engineering

The Department of Chemical and Materials Engineering at the University of Kentucky invites applications for the position of Lecturer in Materials Engineering. This is a non tenure-track faculty position, with duties oriented primarily towards undergraduate education in materials engineering. The initial appointment will be for one year and is renewable. The anticipated start date is Fall 2013.

Applicants must hold BS and PhD degrees in Materials Engineering. The successful candidate will be responsible for teaching core courses in the materials engineering curriculum, including responsibility for administration and technical content development in the undergraduate instructional laboratories. Applicants should have strong written and oral communication skills, broad knowledge of modern instrumentation and methods for materials testing and characterization, and a demonstrated commitment to excellence in undergraduate education

Review of applications will begin immediately and will continue until the position is filled. Candidates should apply for the position on-line at <a href="http://www.uky.edu/HR/UKjobs">http://www.uky.edu/HR/UKjobs</a> (posting SC544215); the deadline for acceptance of applications is March 1, 2013. Submit PDF files consisting of a letter of interest, complete curriculum vitae, a detailed statement of teaching philosophy and teaching experience related to materials engineering, and the names and contact information for at least three references

For more information, contact Prof. Douglass Kalika, kalika@engr.uky.edu. Information on the Department can be found at http://www.engr.uky.edu/cme.

The University of Kentucky is an Equal Opportunity University. We encourage applications from all interested and qualified individuals.





## **POSTDOCTORAL FELLOW POSITIONS**

**ENGINEERING** 

## Nanotechnology

The Ralph E. Martin Department of Chemical Engineering and Microelectronics/Photonics Graduate Program have the following two vacancies for Postdoctoral Fellows:

Nanoscale Sensing/Analytics (Y13040): Apply fundamental principles of transport phenomena in nano- and biotechnology related to spectrophotometrics for biomedicine and human health applications. Qualifications: PhD degree in chemical engineering, chemistry, or equivalent required. Candidates with prior experience in microscopy, chromatography, catalysis, and kinetics are preferred.

#### Nanoscale Metamaterials (Y13039):

Apply fundamental principles of electrodynamics and materials synthesis to nanotechnologies related to electron optics for applications in sustainable energy. Qualifications: PhD degree in Physics, Engineering Physics, Electrical Engineering, or equivalent required. Candidates with prior experience in electron optics tools for fabrication and characterization. computational analysis using finite difference time domain, and synthesis of novel materials with properties not available in nature are preferred.

Successful candidates for both positions should have a successful publishing record in one or more areas listed in the respective qualification sets, experience in mentoring graduate and undergraduate researchers, managing research expenditures and collaborating with faculty on existing research awards. Full position descriptions and qualifications may be found at http://jobs.uark.edu.

Application Process: Applicants for both positions must electronically submit a current CV, a copy of official transcripts, and three letters of reference to Dr. Keith Roper, Associate Professor of Chemical Engineering, at dkroper@uark.edu. Review of applications will begin immediately and continue until the position is filled. For inquiries and questions, contact Amber Hutchinson at aohutchi@uark.edu.

The University of Arkansas is an AA/EO institution. Applicants must have proof of legal authority to work in the United States and are subject to public disclosure under the Arkansas Freedom of Information Act.



# **FACULTY POSITIONS: CHEMICAL SCIENCE**



The Chemical Science Program in the Physical Sciences and Engineering Division at King Abdullah University of Science and Technology (KAUST) invites applications for faculty positions at all ranks (Assistant, Associate, and Full Professors).

King Abdullah University of Science and Technology (KAUST) is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities, generous assured research funding, and internationally competitive salaries. The university attracts top international faculty, scientists, engineers, and students to conduct fundamental and goal-oriented research to address the world's pressing scientific and technological challenges related to the sustainability of water, food, energy, and the environment.

The Physical Sciences and Engineering Division (PSE) encompasses five core disciplines: Chemical and Biological Engineering; Chemical Science; Earth Science and Engineering; Materials Science and Engineering; and Mechanical Engineering. The science produced in PSE is about understanding, modeling, and manipulating matter at all scales: nano, meso, and macroscopic levels; in all forms: bulk, thin films, divided colloids, fluid flows, earth as system etc.; and in interaction with external stimuli: light, heat, fluids, etc.; or stresses. The knowledge created serves to design and engineer materials, technologies, and systems. Find more information about PSE at http://pse.kaust.edu.sa.

The Chemical Sciences Program is based on Chemistry as a core discipline, yet it promotes interactions between KAUST Research Centers, particularly the Catalysis, Membrane, Solar Energy, Red Sea Sciences, and Geometric Modeling and Visualization Centers. Research opportunities in the Chemical Science Program are related to KAUST's strategic goals targeting future needs of the global community. Additional information is available at: http://me.kaust.edu.sa/

The Chemical Science program is currently recruiting for the following faculty positions:

· Polymeric Materials:

With emphasis on the design, synthesis, characterization (structural and molecular), and properties of novel well-defined polymeric materials in line with KAUST's focus in the areas of water, food, energy, and the environment.

• Experimental Polymer Physics:

With emphasis on the dynamics and molecular rheology of polymeric systems including, but not limited, branched polymers, copolymers, functionalized and responsive polymers, nanocomposites, melts, and solutions. Particular interest will be given to applicants with research experience and related background in polymer processing.

• Total Synthesis:

The unique location of KAUST and the presence of two unique key Centers entail the initiation of an organic chemistry research program dedicated to total synthesis of biologically active natural products. The potential faculty program will be devoted to total synthesis of prospective natural products from the Red Sea.

Heterogeneous Catalysis:

The area of research associated with this position is "New Concepts in Acid Catalysis leading to Major Breakthroughs" and its objective is to expand the heterogeneous catalysis expertise to the area of refining and petro chemistry.

All candidates should build an independent high-impact research program and demonstrate capability of working across broad interdisciplinary areas. Senior applicants must have a proven record of high-impact research, been published in premier journals, as well as have strong teaching and student mentoring experience. Applicants should apply at the http://pse.kaust.edu.sa







jobs.ornl.gov

SCIENCES

The Neutron Sciences Directorate (NScD) at Oak Ridge National Laboratory (ORNL) invites applications for the position of Deputy Associate Laboratory Director. The NScD at ORNL operates the High Flux Isotope Reactor (HFIR), the United States' highest flux reactor-based neutron source, and the Spallation Neutron Source (SNS), the world's most intense pulsed accelerator-based neutron source. Together these facilities operate 24 instruments for neutron scattering research, each year carrying out in excess of 1,000 experiments in the physical, chemical, materials, biological, and medical sciences for more than 3,000 visiting scientists. HFIR also provides unique facilities for isotope production and neutron irradiation. To learn more about Neutron Sciences at ORNL go to: neutrons.ornl.gov.

The Deputy Associate Laboratory Director (ALD) supports the Associate Laboratory Director to develop and direct the scientific user and instrument and neutron source development programs at SNS and HFIR and help set the strategic scientific direction to meet the community needs of the future. The Deputy ALD serves as the acting ALD in the ALD's

For a complete description and to apply online see jobs.ornl.gov. Applications must be received by March 31st, 2013.

ENERGY Office of Science

## TENURE-TRACK FACULTY POSITION

Materials Science and Engineering

The Department of Materials Science and Engineering at McMaster University invites applications for a tenure-track position at the Assistant, Associate, or Full Professor level. We seek applicants with expertise in either of two areas of research. The first is solidification and thermo-mechanical processing of light metal alloys, where preference will be given to those candidates who have gained considerable experience within the Canadian industrial sector. The second research area of interest is first principles atomistic computations of thermodynamic and defect properties of materials. Here top priority will be given to candidates who can interact and collaborate with the ongoing experimental activities in the department.

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. McMaster is home to 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.

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, 2013, and the anticipated starting date for the position is January 1, 2014. 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 Street West, JHE 357, Hamilton, Ontario, L8S 4L7, Canada Email: matsci@mcmaster.ca Reference: MATERIALS 2013



## **Paid Undergraduate Program**

Sustainable Materials Research Training (SMaRT) Camp

June 24-August 16 2013

The CSMC Summer Research Program for undergraduates is a 9 week summer research program in sustainable materials science. Research positions are available in Chemistry, Physics, and Engineering. At the start of the summer, students attend a one week tutorial called the Sustainable Materials Research Training (SMaRT) Camp at the University of Oregon. After SMaRT Camp, students perform cutting edge research at one of the CSMC host labs.

Students receive a \$4000 stipend

For more information and to apply online: http://sustainablematerialschemistry.org/node/2857





# **Sandia National Laboratories**

## Limited Term Research Associate

Sandia National Laboratories is searching for a qualified, selfmotivated Limited Term Research Associate of II-VI Semiconductor Quantum Dot Materials for the Nanoscale Sciences Department located in Albuquerque, NM. This position does not currently require a Department of Energy (DOE)-granted security clearance.

We are seeking a candidate interested in working in a dynamic multidisciplinary team investigating quantum dot materials for advancing solid state lighting solutions for meeting our Nation's energy needs. The work will focus on the development of these materials to meet the criteria for use in solid-state lighting in a research group led by Dr. Jim Martin. Limited Term assignments are typically for up to a one-year period, with the option to serve up to one additional one-year assignment at management's discretion.

To learn more about the requirements for this position and to apply online, please visit us at

http://www.sandia.gov/careers/search-openings.html, click Advanced Search and reference Job Opening ID Number: 642370.

U.S. Citizenship Normally Required. Equal Opportunity Employer. M/F/D/V.



# Boston, MA Northeastern University

## ASSISTANT/ASSOCIATE/FULL PROFESSOR

**Division/College: College of Engineering** 

• Requisition Number: FTFR000233 • FT/PT: Full Time • Grade: FAC

**Position Summary:** The Departments of Mechanical and Industrial Engineering (MIE) and Electrical and Computer Engineering (ECE) at Northeastern University invite applications and nominations for a tenure-track faculty position beginning in September 2013 at the Assistant or Associate Professor level, as a possible joint appointment between the two departments in the College of Engineering. 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 college's research efforts in security including but not limited to threat-detection and mitigation such as for use in the screening of suicide bombers or airline passengers; security of critical infrastructures such as transportation, power, and communication systems; unmanned or remote-controlled devices for harsh environment exploration, hazard diagnosis and removal; enhanced armor or exo-skeletal systems for intelligent hazard diagnosis. Software- or algorithm-based security efforts that show promise such as compressive sensing may also be considered.

#### **Qualifications:**

A doctorate in mechanical engineering, electrical and computer engineering or in a closely related field is required. Excellence in teaching is expected.

#### **Additional Information:**

The MIE Department at Northeastern is a large and growing academic enterprise comprising 41 full-time faculty with \$10 million in annual research funding, approximately 100 Ph.D., 300 M.S., and an undergraduate student population of over 1,100. In addition, the MIE Department is home to three federally funded research centers (of the eight federal centers in the College of Engineering): 1) The NSF Nanoscale Science and Engineering Center for High-rate Nanomanufacturing, 2) The NSF Center for Health Organization Transformation and 3) The Department of Veterans Affairs New England Healthcare Engineering Partnership. The ECE department, with 47 faculty members, \$13.1 million in annual research funding, approximately 200 Ph.D., 230 M.S., and 550 undergraduate students, has established areas of excellence in sensing and imaging (NSF ERC), communications and digital signal processing, power and control systems, power electronics, RF/microwave magnetic and multiferroic materials and device technologies. The ECE Department, in addition to the NSF ERC Center for Subsurface Sensing and Imaging Systems, is home to the ALERT Homeland Security Center of Excellence, and shares the Institute of Information Assurance with the College of Computer Science. 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 also has a 7,000 square foot class 10/100/1000 micro/nanofabrication facility available to faculty, the Kostas Center (http://www.kostas.neu.edu/), and has recently opened the 70,000 square foot Kostas Research Institute for Homeland Security at our Burlington campus.

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 Andrew Gouldstone, Search Committee Chair (a.gouldstone@neu.edu)

To be considered for this position please visit our web site and apply on line at the following link: http://apptrkr.com/310456

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.