

DIRECTOR

Materials Technology Center Southern Illinois University Carbondale

Southern Illinois University Carbondale (SIUC) invites applications and nominations for the position of Director of the Materials Technology Center (MTC) (<http://mtc.engr.siu.edu/>). This exciting position offers to the qualified applicant the opportunity to be affiliated with over 25 active materials and nanotechnology research faculty in the Colleges of Science and Engineering. In addition to an attractive start-up package and a highly competitive salary, the successful applicant will benefit from a well-established industrial advisory board and a substantial annual budget for center operation. For more details visit <http://affect.siu.edu/jobs.html>.

Qualifications: An earned doctorate in one of the engineering or science disciplines at a research-extensive university; a distinguished record of teaching, scholarship, funded research, and service in a materials-related and/or nanotechnology area, with credentials for an appointment to the rank of Associate or Full Professor in the department most appropriate to the candidate's expertise; and experience with multidisciplinary research groups and leadership qualities to promote collaboration and ensure vigorous growth of the Center in the full range of materials research and/or nanotechnology.

Applications/Nominations: Completed applications will consist of a letter of application, a current CV, a list of four references, a research statement, and a vision statement for a center such as the SIUC MTC. All application/nomination material may be emailed to jlwilham@siu.edu (electronic submission is preferred). Alternatively, applications may be submitted to: MTC Search Committee, Office of the Vice Chancellor for Research & Graduate Dean, Anthony Hall Room 220, Mail Code 4344, Southern Illinois University Carbondale, 1265 Lincoln Drive, Carbondale, IL 62901. Review of applications/nominations will begin **July 1, 2011** and continue until the position is filled.

SIUC is an Affirmative Action/Equal Opportunity Employer that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcomed and encouraged and will receive consideration.



KYUSHU UNIVERSITY

Faculty and Postdoctoral Research Associates International Institute for Carbon-Neutral Energy Research

The International Institute for Carbon-Neutral Energy Research (I²CNER) at Kyushu University in Japan is actively seeking candidates for open-rank faculty and postdoctoral research associates.

I²CNER is a member of the World Premier International Research Center Initiative established by the Japanese Ministry of Education, Culture, Science and Technology (MEXT). Faculty members and researchers associated with I²CNER are dedicated to the Institute's mission to contribute to the creation of a sustainable and environmentally friendly society by advancing fundamental science to reduce CO₂ emissions and the realization of a hydrogen economy. The ITO Campus of the Kyushu University houses extensive state-of-the-art experimental and computational facilities. For more information, visit <http://i2cner.kyushu-u.ac.jp/en/recruit/recruit.php>.

The successful candidate will have experimental or computational expertise in the physics, chemistry, mechanics, and materials science aspects of:

- Basic science issues underlying CO₂ separation/concentration and geologic/oceanic capture and sequestration
- Hydrogen embrittlement
- Solar/chemical hydrogen production

Faculty members are expected to initiate and sustain vigorous research programs that both advance and are relevant to the mission of I²CNER. Candidates for faculty positions must have achieved national and international recognition for their research accomplishments. Postdoctoral research associates will join research groups relevant to their field of expertise and education.

Application Process: Applicants must provide: 1) Application Form (the designated form is on the website); 2) curriculum vitae that details research experience and interests; 3) a list of publications; and 4) the names and contact information of four references. All materials must be submitted in English. Applications should be submitted via e-mail to wpi-office@i2cner.kyushu-u.ac.jp.

Starting Date: As soon as possible after closing date

Salary: Commensurate with qualifications and experience

Application Deadline: Wednesday, June 8, 2011 at 17:00 (Japan Time); interviews may take place prior to the closing date; however, no final decisions will be made until after this time.

For questions on the application procedure, please contact:

International Institute for Carbon-Neutral Energy Research (I²CNER)
Kyushu University
744 Motooka, Nishi-ku, Fukuoka, 819-0395 Japan
Tel: 81-92-802-6932; Fax: 81-92-802-6939
wpi-office@i2cner.kyushu-u.ac.jp

Kyushu University is an Equal Opportunity/Affirmative Action Employer. The administration, faculty and staff embrace diversity and are committed to attracting qualified candidates who also embrace and value diversity and inclusivity.





UNIVERSITY of
HOUSTON
CULLEN COLLEGE of ENGINEERING

DEPARTMENT CHAIR Mechanical Engineering

The Cullen College of Engineering of the University of Houston invites nominations and applications for the position of Chair, Department of Mechanical Engineering (ME). The successful candidate should have an established national and international reputation in research, and a distinguished record of academic and professional leadership. The ME department has programs leading to bachelors, masters, and doctoral degrees. The department has several highly respected research programs, and is building on these strengths through faculty searches. Detailed information, with links to university programs, can be found at <http://www.egr.uh.edu/me/>. The University of Houston was recently elevated to Tier One status, with "very high research activity," by the Carnegie Foundation for the Advancement of Teaching.

The position is available beginning Fall 2011, with competitive salary and benefits. The Search Committee will accept and review applications until the position is filled. Send nominations or applications, including a letter outlining experience and qualifications, a current CV, and the names of at least four references to: ME Chair Search Committee, Cullen College of Engineering, E421 Engineering Building 2, University of Houston, Houston, TX 77204-4007, or e-mail Mrs. Kitty Karson at kkarson@uh.edu.

The University of Houston is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.



Northeastern University

Faculty Position
Chemical Engineering Department

The Department of Chemical Engineering at Northeastern University invites applications for a tenure-track position. Outstanding candidates at any level of seniority may apply. Research areas of interest include, but are not limited to, catalytic materials associated with alternative energy, soft materials, and systems and synthetic biology. These areas have been identified as strategic areas of growth within the department to complement existing strengths in materials engineering and biological engineering.

Senior-level candidates should have a doctoral degree in chemical engineering or other closely related disciplines and a demonstrated record of interdisciplinary research with national and international collaborations in both academia and industry, and recognition for accomplished and innovative teaching. It is expected that successful senior candidates will be individuals who currently lead active and substantial research programs.

How To Apply:

Applications should include 1) a CV, 2) research statement, 3) teaching statement, and 4) a list of five references with relationship and contact information specified.

To apply, please visit the College of Engineering website at <http://www.coe.neu.edu/coe/> and click on Faculty Positions; the position is listed as **Requisition Number 113719**. Questions regarding this position should be directed to cheme_search@coe.neu.edu.

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.

ASSOCIATE PROFESSOR OF PROFESSIONAL PRACTICE

Department of Chemical Engineering

The Department of Chemical Engineering (CHEN) at Columbia University invites applications for a Practice Faculty Position at the Associate Professor level.

Associate Professors of Professional Practice at Columbia are experienced and innovative master practitioners who bring the latest innovations and scholarship to their teaching in addition to specialized expertise in one or more fields of practice. In addition to significant teaching and mentoring responsibilities, the Associate Professor of Professional Practice in Chemical Engineering will assume responsibility for directing a new master's level graduate program, ensuring adequate linkage with industry and practical application.

Candidates for appointment must demonstrate practice expertise, professional competence and scholarship, and recognition as an expert in one or more areas of chemical engineering. A Master of Science in Chemical Engineering, with a minimum of 10 years of direct industrial practice, professional engagement, or consulting experience is required, though a doctoral degree in Chemical Engineering with significant practice experience is preferred.

Candidates must have a distinguished record of achievement as evidenced by leadership in their field of expertise and professional recognition, such as by election as a Fellow to the American Institute of Chemical Engineers. They should also have significant chemical engineering teaching experience in an adjunct faculty position.

The search will close no sooner than May 15, 2011, and will remain open until the position is filled. The **starting date is July 1, 2011**. Candidates should submit a statement of teaching objectives that demonstrates a commitment to chemical engineering education, a curriculum vitae, and three letters of support.

Please apply online at Columbia University webpage:
<https://academicjobs.columbia.edu/applicants/Central?quickFind=54509>

Columbia University is an equal opportunity/affirmative action employer.





Assistant Professor, Materials Joining Department of Materials Science and Engineering

The Department of Materials Science and Engineering at The Ohio State University invites applications from outstanding candidates for a tenure-track, assistant professor position in the area of materials joining. The Welding Engineering Program at OSU recently merged with the Department of Materials Science and Engineering and now represents one of the world's largest materials science and engineering departments focused on structural materials. The Welding Engineering Program (<http://www.matsceng.ohio-state.edu/weldingengineering>) offers degrees at the BS, MS, and PhD levels and is the only ABET accredited welding engineering program in North America. Recently, NSF has awarded OSU an Industry/University Cooperative Research Center (I/UCRC) focusing on materials joining science for energy applications (<http://materialsjoining.osu.edu/cimjsea>). The candidate for this position will have opportunities to develop collaborative research within this center. OSU is also the recipient of the NSF ADVANCE grant for institutional transformation.

A doctoral degree in Welding Engineering, Materials Science and Engineering, Mechanical Engineering, or related fields is required. Postdoctoral research experience in materials joining

is preferred and a strong publication record is expected. Successful candidates should be proficient and have demonstrated skills in one (or more) of the following areas: computational materials modeling, process modeling, structural design, structural integrity, fitness-for service, welding process technology, or welding metallurgy.

The evaluation of applications will begin immediately. It is anticipated that this position will be filled by **October 1, 2011**. A complete curriculum vitae and separate teaching and research statements can be sent by e-mail to msearch@matsceng.ohio-state.edu or sent by mail to:

Prof. John C. Lippold
Welding Engineering Program
Dept. of Materials Science and Engineering
The Ohio State University
1248 Arthur E. Adams Drive
Columbus, OH 43221

Ohio State University is an Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from qualified underrepresented groups including minorities, women, veterans, and individuals with disabilities.

Tenure-Track Faculty Position Structural Analysis of Materials



The Faculty of Engineering at McMaster University invites applications for a tenure-track faculty position in the area of Materials Characterization. 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. This position will expand upon current McMaster expertise in materials analysis and nuclear materials as well as contributing to the Faculty's strategic initiatives in sustainability.

The applicant should have expertise in the field of advanced characterization techniques, including transmission electron microscopy or/and atom probe field ion microscopy, with a focus on structure and properties relationships of materials. The applicant is expected to develop a strong externally funded research program and capitalize on existing and new infrastructure at the university and in particular at the state-of-the-art Canadian Centre for Electron Microscopy. This centre currently houses two aberration-corrected microscopes and will commission a 3D Atom Probe and an Auger Scanning Microscope. Over the last few years, McMaster University has received funding from the Canada Foundation for Innovation, the Ministry of Research and Innovation and the Natural Sciences and Engineering Research Council totaling approximately \$40M in materials analysis at the Canadian Centre for Electron Microscopy and the Centre for Advanced Nuclear Systems. This position will build upon faculty expertise in materials engineering, as well as facilities and experience available through the Brockhouse Institute for Materials Research.

Applicants must have earned a PhD degree in Materials Science/Engineering, Physics, Applied Physics, or a closely related discipline. The successful applicant will be expected to develop an effective research program and demonstrate a strong commitment to teaching and curriculum development at both the undergraduate and graduate levels. The Faculty expects the successful candidate to become registered with the Professional Engineers of Ontario. Where full licensure is not possible, a limited license is also acceptable.

This position is available as of July 1, 2011 and will remain open until the position is filled. Applications by e-mail are encouraged. 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, Hamilton, Ontario, L8S 4L7, Canada
Email: matsci@mcmaster.ca
Reference: **MATERIALS ANALYSIS 2011**

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.



FACULTY POSITIONS Department of Materials Science and Engineering

The Department of Materials Science and Engineering of the University of Florida invites applications for a non-tenure track faculty Lecturer position dedicated to undergraduate laboratory instruction. This position will be on a 12-month appointment starting from the Fall 2011 Term. The main duties for this position include teaching two general laboratory courses for juniors (Materials Lab 1 and 2) and coordinating specialty laboratory courses for seniors. In addition, this Lecturer will also oversee the entire laboratory experimental experience for undergraduate students in the Materials Science and Engineering degree program, which may include contributing to the curriculum of the Capstone Design course, student participation in the Integrated Product and Process Design (IPPD) program and Research Experience for Undergraduates (REU), computer software use, etc.

The candidate is expected to have extensive laboratory experiences and be dedicated to undergraduate teaching. The candidate is also expected to have broad knowledge on various types of materials including metals, ceramics, electronic materials, polymers, and bio-materials. A doctoral degree in materials science and engineering or a related field is preferred, although a Master's degree in these fields is also acceptable.

The UF MSE Department is a vibrant, multidisciplinary highly-collaborative environment and has consistently ranked among the top ten departments in the nation for both graduate and undergraduate programs. It is also among the largest MSE departments in the nation with 37 faculty members, ~250 graduate students, over 340 undergraduates, and over \$10 million in annual research

expenditures. The department provides integrated Materials Science and Engineering education devoted to biomaterials, ceramics, composites, electronic and optical materials, metals, and polymers.

We are dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multi-cultural environment; we strongly encourage applications from women, members of underrepresented groups, individuals with disabilities, and veterans.

The search committee will begin reviewing applications on **April 21, 2011**, and will continue to receive applications until the position is filled. To apply, please reference **position number 0009567**, send a curriculum vitae, a statement of prior teaching and laboratory experiences, teaching philosophy and vision for undergraduate laboratory experience, and contact information for three references to:

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

In addition, PDF files of the application package should be e-mailed to Ms. Alice Holt at aholt@mse.ufl.edu. For additional information about the Department and University, please visit our Web site at <http://www.mse.ufl.edu>.

The University of Florida is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority group members. According to Florida law, applications and meetings regarding applications are open to the public on request.

RESEARCH SCIENTIST Air Liquide

Air Liquide develops innovative technologies and sustainable solutions, optimizing the use of air and the planet's natural resources, enabling progress and preserving life. Located in over 75 countries, we have more than 1,000,000 customers globally in diverse industries such as steel, food and beverage, electronics, and pharmaceuticals.

Air Liquide Research and Development is seeking a Research Scientist to be located in Newark, Delaware. The individual will perform (but not be limited to) the following responsibilities:

- The initial roles of an individual filling this position within the Electronics group will be responsible for projects involving plasma etching of thin semiconductor films
- Achieve and coordinate research project objectives and deliverables in a timely manner
- Prepare presentations materials for internal and external meetings and conferences
- Interaction with customers to promote research activities

Requirements include a PhD degree in Materials Science or Chemical Engineering, preferably with experience in plasma etching of semiconductor thin films. Knowledge, skills, and abilities required. Experience with design of experiments is also preferred. To apply, send resumes to recruiting@airliquide.com.

Air Liquide is an equal opportunity employer.





POSTDOCTORAL POSITIONS Department of Materials Science and Engineering

Rutgers Department of Materials Science and Engineering seeks candidates for the following positions:

Research associate mechanical properties of structural composite materials. Candidate must have a PhD degree in Chemistry, Chemical Engineering, Mechanical Engineering, or Materials Science with strong background in materials processing and characterization, mechanical properties, and associated computational aspects for structural composite materials. Researcher will join an established group working with novel green materials manufacturing technology; strong collaboration and project management skills necessary. Experience teaching, mentoring, and managing a research group preferred. Excellent writing skills essential. Position available in July 2011. To apply, please indicate "**Mechanical Properties**" in the subject line and follow submission requirements below.

Ceramic green body forming research. PhD degree in Chemistry, Chemical Engineering, or Materials Science required along with scientific and technical experience in ceramic forming methods and associated processing additives, colloid and surface chemistry, and diagnostic and characterization methods. Researcher will join an established group working with novel green materials manufacturing. Demonstrated ability to initiate, conduct, and publish research is required. The position will be available in July 2011. To apply, please indicate "**Ceramic Materials Research**" in the subject line and follow submission requirements below.

Postdoctoral researcher mechanical properties of structural materials. Researcher will join an established group working with novel green materials manufacturing technology. Candidate must have a PhD degree in Chemistry, Chemical Engineering, Mechanical Engineering, or Materials Science. Experience with materials processing and characterization, mechanical testing techniques, and computational methods is preferred. Excellent writing skills desired. Position available in July 2011. To apply, please indicate "**Mechanical Properties Postdoc**" in the subject line and follow submission requirements below.

Luminescent materials research. PhD degree in Chemistry, Chemical Engineering, Physics, or Materials Science required along with scientific and technical experience in one or more of the following areas: solution chemistry, hydrothermal synthesis, materials processing and optical properties measurements and computations. Demonstrated ability to initiate, conduct, and publish research. The position will be available in July 2011. To apply, please indicate "**Luminescent Materials Research**" in the subject line and follow submission requirements below.

Submission Requirements:

Send 1-2 page cover letter, date of availability, resume, three references, and three relevant publications no later than **May 13, 2011** to Richard E. Riman, Department of MSE, Rutgers, The State University of New Jersey, 607 Taylor Road, Piscataway, NJ 08854-8065, 732-445-4946, riman@rci.rutgers.edu.

Rutgers is an equal opportunity/affirmative action employer.

TEM Specialist Institute of Ion Beam Physics and Materials Research

Vacancy Notice Registration-No. 11E/2011

The Helmholtz-Zentrum Dresden-Rossendorf (HZDR) is a research centre with about 800 employees. The main topics are advanced Cancer Research, Nuclear Safety Research and Materials Research. The research is performed in six scientific institutes which cooperate with the universities, extra-faculty institutes and the industry. Further information can be found at <http://www.hzdr.de>.

The Institute of Ion Beam Physics and Materials Research (IIM) of the HZDR has an opening for a staff scientist position for a TEM Specialist preferably starting on 01.01.2012. The initial appointment will be a two-year contract, but based on success, the position can become tenured after two years. The salary is according to German Public Service classification (TVöD).

Requirements:

- PhD degree in Physics or Materials Science
- PostDoc work focused primarily on transmission electron microscopy (TEM)
- Comprehensive knowledge and experience in TEM (imaging and analytics of inorganic materials)
- Ability for scientific and technical supervision of PostDocs, PhDs, and technical staff
- Solid publication record and ability to acquire external funding

Tasks:

- Responsible for TEM analysis and TEM preparation laboratory
- Performance of TEM investigations in a close teamwork with the scientific groups of the institute and external collaborations
- Acquisition and leading management of projects
- Scientific and technical staff supervision during TEM work and sample preparation

The work will be performed using an FEI-Titan 80-300 microscope equipped with image corrector and analytical instrumentation (EDX, EELS). In addition, a manned preparation laboratory for both standard plan view/cross-sectional preparation and TEM lamella fabrication by FIB technique (NVision 40) is available as well. Detailed information on the institute and the TEM laboratory can be found at <http://www.hzdr.de/FWI>.

Please address your application (cover letter, CV, references, etc.) with the **Registration-No. 11E/2011** by 01.06.2011 preferably per email to bewerbung@hzdr.de. Please add the appended documents in Word or PDF file format.

For further information do not hesitate to contact:

Prof. Manfred Helm, Tel.: +49 351 260 2260, email: m.helm@hzdr.de;
Prof. Jürgen Fassbender, Tel.: +49 351 260 3096, email: j.fassbender@hzdr.de; or
Dr. Johannes von Borany, Tel.: +49 351 260 3378, email: j.v.borany@hzdr.de.

Women are explicitly invited to apply. Handicapped will be preferred in case of equal qualification.

Helmholtz-Zentrum Dresden-Rossendorf
Personnel Department
P.O. Box 51 01 19
01314 Dresden, Germany

HELMHOLTZ
ZENTRUM DRESDEN
ROSSENDORF