



The Center for Functional Nanomaterials (CFN) at Brookhaven National Laboratory is seeking candidates for a Scientific Staff Position at the Assistant or Associate level in the area of *in-situ* **studies on model catalysts**. This position requires a PhD degree in chemistry, physics, materials science, or a related field and at least two years of postdoctoral experience. A demonstrated record of successful experimental research in the broader field of catalytic chemistry is required. Previous experience in model catalysis studies or the probing of energy-relevant chemical processes is desirable. Expertise in specific experimental methods, such as STM, and other surface science sample preparation and characterization techniques (XPS, ISS, LEED, IRRAS) is a plus.

The department is seeking a full-time staff scientist in the area of *in-situ* studies on model catalysts. The CFN is a user-oriented research center with a scientific focus on energy-related themes, and with state-of-art facilities in materials synthesis, nanofabrication, and structural and functional characterization. The successful candidate will be expected to develop a high-visibility experimental research program within the CFN's Interface Science & Catalysis Group, emphasizing the interplay between the structure, chemical composition, activity, and selectivity of model catalysts. World-class instrumentation, including a new Reactor Scanning Tunneling Microscope capable of simultaneously probing model catalysts at relevant pressures and temperatures, will be available. The appointment is anticipated at the Assistant Scientist level, but a more senior appointment may be considered for exceptionally qualified candidates.

When submitting your electronic application, please include (in one document) your curriculum vitae, a list of publications and presentations, and a brief (maximum 2 pages) statement of research interests. The level of the position will be based on the background and experience of the selected candidate. Under the direction of P. Sutter, Center for Functional Nanomaterials. **Please go to http://www.bnl.gov/hr/careers** to apply for this position. **Please apply to Job ID # 15124**.

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

### RESEARCH CENTER DIRECTOR Montana Tech

Montana Tech is accepting applications for the position of Director, Center for Advanced Mineral and Metallurgical Processing. The Center conducts metallurgical and materials research (approx. \$3 million/annum) on behalf of public and private sector interests. Key responsibilities include establishing and maintaining the Center vision, providing technical direction to Center staff, securing funding, and promoting transfer and adoption of technologies developed by the Center. The salary range is \$90K to \$120K commensurate with experience.

The full position description, required qualifications, and application instructions are posted under the Academic Faculty/Professional heading at www.mtech.edu/employment.

EEO/AA

**Sandia National Laboratories** 

A Department of Energy National Laboratory

#### **Research Positions** Surface and Interface Sciences Department

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

#### The Mechanics and Tribology of Nanomaterials

Provide scientific expertise, versatility, and leadership that will enable the continuation of sustained tradition in high impact interfacial nanotribology and nanomechanics research. Must have a clear vision of how nanomechanics and nanotribology research will impact a spectrum of logically-connected mission-related research interface science research austivities compatible with existing Office of Science programs, collaborative development of novel scanning probe-based MEMS characterization techniques, scientific understanding of nanoscale interfacial phenomena, nanomechanics and nanotribology of advanced nanostructured materials, and the scientific understanding of soft materials systems. For more information, please go to our online site listed below. **Reference Job Requisition Number 64067.** 

#### Surface/Interface Materials Scientist/Engineer

Provide scientific expertise, versatility, and leadership that will enable the evolution of sustained tradition in high impact surface and interface materials science research. We are interested in conducting research addressing key surface and interface science materials issues that impact the following unprioritized research areas: electrical energy storage, nanoelectronics (including graphene) and related sensors, and improved hybrid (inorganic/organic) photovoltaics and devices. Lead a high impact research program that is flexibly aligned with the science and mission priorities of the Department and the Physical, Chemical and Nanosciences Center (www.sandia.gov/pcnsc). For more information, please go to our online site listed below. **Reference Job Requisition Number 64069**.

A PhD degree in Physics, Chemistry, Materials Science, Engineering, or other related field is required. A high-impact postdoctoral or equivalent experience is also required. Additional scientific research experience beyond the postdoctoral level further demonstrating the technical leadership and scientific stature is desirable. Demonstrate the potential to conduct world-class research relevant to the mission of the department and the Physical, Chemical & Nano Sciences Center. Demonstrate research interests and vision that are flexible, synergistic, and potentially collaborative with existing research activities (www.sandia.gov/pcnsc/departments/surfaceinterface.html). Demonstrate interpersonal skills conducive to interfacing with a wide variety of internal and external collaborators in multiple scientific projects. Current or recent DOE Q/L or DOD TS/S Security Clearance is desirable.

These positions are available immediately, and the search will continue until the position is filled.

Please apply online at http://www.sandia.gov/careers/search-openings.html, click Search for Openings, and reference the Job Requisition Number. Attach a resume/ CV AND e-mail a maximum 3-page summary of relevant research background and interests to clporte@sandia.gov. Please reference Job Title and Requisition Number in the subject line. U.S. Citizenship required.

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

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# Molecular Foundry Director

The Materials Sciences Division at the University of California's Lawrence Berkeley National Laboratory invites applications and nominations for the position of Director of the Molecular Foundry. The Molecular Foundry is a U.S. Department of Energy "User Facility", whose staff of 60 is engaged in a broad range of nanoscience research programs. Scientific staff pursue projects of their own design, and also collaborate with scientists (users) from around the world whose own research efforts benefit from effective use of the Foundry's equipment, techniques, and staff expertise. The Foundry Director will be appointed as a Senior Scientist at Berkeley Lab. The possibility exists for an additional affiliation with the University of California.

### **Duties of the Foundry Director:**

 Articulate and implement a vision to guide the scientific direction, structure, organization, management and operation of internal research and user-support

- activities of the Foundry, as it continues to grow.
- Work effectively with Berkeley Lab and DOE management to ensure that sufficient resources are available to support both the user program and the internal research mission.
- Recruit and retain staff, and provide leadership to foster staff career growth and advancement.

#### Applicants should have:

- Distinguished record of excellence in nanoscience research
- Demonstrated record of breadth of knowledge and vision across a wide range of nanoscience fields
- Ability to manage the scientific, managerial and operational components of a large, complex, internationally recognized scientific enterprise

Please see the complete job posting and apply at http://foundry.lbl.gov/, # 23768.



## Discover potential at the nanoscale.

The Molecular Foundry is a DOEfunded nanoscience research center that provides state-of-the-art instrumentation, scientific expertise and specialized techniques and training to help address the myriad of challenges in nanoscience and nanotechnology.

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### MATERIALS PROCESSING POSITIONS Department of Material Science and Engineering



The Department of Material Science and Engineering at Rutgers University is seeking to fill multiple industrial and federal-sponsored **postdoctoral** and **research associate** positions in ceramic processing and luminescent materials research. Demonstrated scientific and technical experience in one or more of the following areas, including solution and hydrothermal synthesis; powder processing; luminescent materials; materials characterization; and structural, biomedical, and electrochemical properties is preferred along with demonstrated ability to initiate, conduct, and publish cutting-edge research.

Candidates exhibiting exceptional research capabilities, collaboration, and project management skills during the course of their first year will be considered for a full time research and development position by the corporate research sponsor. The positions, available in March 2010 or sooner, offer a highly competitive salary and benefits. Candidates should submit the following: a 1-2 page cover letter stating why they are qualified and when they are available for employment, curriculum vitae, three letters of reference, and relevant publications no later than **March 1, 2010** 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.

#### CHAIR AND PROFESSOR Department of Materials Science and Engineering University of Florida

Applications and nominations are invited for the position of Chair and Professor of the Materials Science and Engineering (MSE) Department at the University of Florida. A doctoral degree in materials science and engineering or a related field is required, and management experience is preferred. The candidate should demonstrate a commitment to research, students, and teaching. The applicant should have national and international visibility and be able to represent the department in a positive way to others both within and outside the university. Finally, a desirable quality of the candidate is an ability to develop consensus, cooperation, and harmony within the department. The candidate is expected to have a vision to lead the department to become the best in the nation. The candidate should describe previous activities mentoring minorities, women, or members from underrepresented groups. The application should address all of these requirements.

To ensure full consideration, vitas, dossiers, and statements of intent to apply should be submitted by **March 1, 2010**, when the Search Committee will begin reviewing applications. Individuals wishing to apply must go online to https://jobs.ufl.edu, and search for **requisition #08030866**. Applications received after this date may be considered at the discretion of the Committee and/or hiring authority.

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



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The University of Florida is an Equal Opportunity Employer. Women and minorities are strongly encouraged to apply. The selection process will be conducted in accord with the provisions of Florida's 'Government in the Sunshine' and Public Records Law.

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### FACULTY POSITION

Department of Materials Science and Engineering University of Florida

The Department of Materials Science and Engineering of the University of Florida invites applications for a tenure/tenure-track position at the rank of Assistant, Associate, or Full Professor. Candidates are sought with interests in materials for energy technologies or biomaterials with expertise in, for example:

- Batteries, fuel cells, advanced materials for energy generation or storage;
- Synthesis and processing of organic materials for energy applications;
- Biomaterials including bioactive materials, self assembly and biomimetics, materials for disease detection and treatment, cellular production of novel materials, tissue engineering.

In addition, the College of Engineering at the University of Florida will be seeking to fill as many as 20 faculty lines in 2010 in strategically targeted areas; it is likely that one of more of these lines will be in the above areas. A doctoral degree in materials science and engineering or a related field is required, and postdoctoral experience is preferred.

The search committee will begin reviewing applications on February 4, 2010, and will continue to receive applications until the position is filled. Individuals wishing to apply must go online to https://jobs.ufl.edu, and search for requisition #08030876.

In addition, PDF files of a CV, statement of research and teaching interests, and contact information for three references to should be e-mailed to Mr. Matthew Walters at **mwalt@mse.ufl.edu** referencing **position #00012759.** For a more detailed advertisement or 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 Equal Opportunity Employer. Women and minorities are strongly encouraged to apply. The selection process will be conducted in accord with the provisions of Florida's 'Government in the Sunshine' and Public Records Law.



#### POSTDOCTORAL FELLOWSHIP School of Engineering and Applied Sciences Harvard University

Applications are invited for a postdoctoral position at the School of Engineering and Applied Sciences, Harvard University. The project will be on theory and modeling of materials phenomena with relevance to understanding nanoscale science of oxidation, ultra-thin oxide growth and related topics. Experience with one or more topics in atomistic modeling and simulation of metal-oxygen interactions, oxide growth, interaction between metal surfaces and aqueous media, analyses of surface reactions is desired. The candidate should have a PhD degree in Physics, Chemistry, Materials Science, Engineering, or related disciplines with extensive experience in modeling, theory, and computational physics or computational materials science.

We are seeking outstanding candidates who are highly motivated and have strong academic record. Applicants should send their CV, list of publications and contact information for three references to: LaShanda Banks (Electronic Mail: **Ibanks@seas.harvard.edu**). Please include "PDF Application" in the subject line of the email.

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

# Place Your Ad Today!

Contact Mary E. Kaufold at 724-779-2755 or kaufold@mrs.org

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### ASSISTANT PROFESSOR, Physics Department

Specialization(s): Materials physics or nanoscience/nanotechnology, experimentalist preferred.

Brief Description of Duties/Responsibilities: Teaching of introductory and upperlevel courses for physics and other science majors, and elementary core courses for other undergraduates; mentoring majors; scholarly research with strong potential for undergraduate and master's degree student participation; scientific interaction with departmental faculty; participation in collegial service and professional activities. The department is currently in the process of establishing a master's degree program in applied physics and the successful candidate will be expected to actively participate in this endeavor.

**Required Qualifications:** Ph.D. in Physics, material science or closely related field and a demonstrated commitment to undergraduate education with evidence of teaching effectiveness and ability to perform research that potentially involves undergraduate and master's degree students, preferably in collaboration with current department faculty.

**Preferred Qualifications:** Primary interest in materials physics or nanoscience/nanotechnology, experimentalist preferred. Preference will be given to applicant committed to collaborating with one or more of the current faculty members. We value effective teaching at all levels, student involvement in faculty research, and energetic participation in the scientific community by faculty and students. Our department houses a significant component of an NSF-supported Materials Research Science and Engineering Center, in collaboration with Yale and Brookhaven.

Application Process: Please submit Letter of Interest, Curriculum Vita with publication list, letter describing professional goals and statement of teaching perspective and scholarly interests, Graduate Transcript. Identify at least three references with e-mail addresses and phone numbers. Send materials to Dr. Christine Broadbridge, Chairperson, Department of Physics, Southern Connecticut State University, 501 Crescent St., New Haven, CT 06515 or e-mail to: physicssearch@southernct.edu

In order for your application to be given full consideration, all materials must be received by February 16, 2010. Position will remain open until filled.

SCSU is an Affirmative Action/Equal Employment Opportunity employer. The University seeks to enhance the diversity of its faculty and staff. People of color, women and persons with disabilities are strongly encouraged to apply.

### Faculty Position in Mechanical Engineering in the area of Energy CALIFORNIA INSTITUTE OF TECHNOLOGY

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

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

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

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



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

# Imperial College London



# Faculty Opportunities

King Abdullah University of Science and Technology (KAUST), located in Saudi Arabia, is an international graduate-level research university dedicated to advancing science and technology through bold and collaborative research and to addressing challenges of regional and global significance, thereby serving the Kingdom, the region and the world. KAUST is committed to cuttingedge research in the globally significant areas of Energy, Water and Food. In addition, KAUST emphasises research on the Environment and Red Sea and the discipline of Computational Science and Engineering serves as an enabling technology for all its research activities.

KAUST is located on the Red Sea at Thuwal (80km north of Jeddah). Newly opened in September 2009, KAUST is an independent and merit-based university and welcomes exceptional researchers, faculty and students from around the world. KAUST offers attractive base salaries and a wide range of benefits. Faculty enjoy secure research funding from KAUST and have opportunities for additional funding through several KAUST provided sources and through industry collaborations. Further information about KAUST can be found at http://www.kaust.edu.sa/

KAUST seeks to hire faculty in Material Science and Engineering from the following areas (listed in order of priority):

- · Corrosion and electrochemistry
- Novel and Functional Inorganic Materials Synthesis related to the energy area especially solar
- Synthetic Organic Chemistry (including polymers & small molecules)
- Magnetism
- Biomaterials
- Graphene & Carbon Nanotube Physics
- Kinetics of materials
- Modern ceramics

An earned PhD in Materials Science and Engineering or a related field, evidence of the ability to pursue a program of research including collaborative and interdisciplinary research in one or more of KAUST's Research centers, and a strong commitment to graduate teaching and mentorship are required.

Applications should include a curriculum vitae, brief statements of research and teaching interests, and the names of at least 3 referees for an Assistant Professor position and at least 6 referees for an Associate or Full Professor position. Candidates are requested to ask referees to send their letters directly to the search committee. Applications and letters should be sent via electronic mail to: kaust.materials@imperial.ac.uk. The review of applications will begin immediately and applicants are strongly encouraged to submit applications as soon as possible.

As part of an Academic Excellence Alliance agreement between KAUST and Imperial College London, the KAUST faculty search committee consisting of Professors from the Materials Department at Imperial College London, will evaluate applicants for the faculty positions at KAUST. However, KAUST will be responsible for all hiring decisions, appointment offers, recruiting, and explanations of employment benefits. The recruited faculty will be employed by KAUST in the Kingdom of Saudi Arabia and not by Imperial College London.

#### Closing date: 30 April 2010.

Committed to equality and valuing diversity. We are also an Athena Silver SWAN Award winner and a Stonewall Diversity Champion.

# POSTDOCTORAL RESEARCH ASSOCIATE IN NEUTRON SCATTERING

Neutron Scattering Science Division Oak Ridge National Laboratory Oak Ridge, Tennessee - ORNL10-34-NSSD

The Powder Diffraction Group in the Neutron Scattering Science Division (NSSD) of Oak Ridge National Laboratory (ORNL) (http://www.ornl.gov) has several opportunities for postdoctoral research. Specific areas of interest include the following:

- Phase transformation and deformation behavior in high-strength steel
- Structure, thermal stability, and deformation of nano structured ferritic alloys
- Texture and dynamic recrystallization of Mg alloys
- In-situ neutron scattering measurement of transient
  phenomena

Each candidate will be part of an interdisciplinary research team involving scientists in several divisions at ORNL, primarily Materials Science and Technology Division and Computer Science and Mathematics Division. The research will utilize the VULCAN diffractometer at the Spallation Neutron Source as a primary research tool, although there will be complementary experiments involving synchrotron scattering and microscopy. In commissioning as of summer 2009, VULCAN is a world-class engineering diffractometer designed to tackle a broad range of problems in materials science and engineering, including stress mapping in structural components, in-situ deformation studies, transient behaviors during synthesis and processing, and the kinetics of multi-length scale phase transformations.

QUALIFICATIONS: A Ph.D. in materials science, physics, mechanical engineering, or related fields is required. Preference will be given to candidates with experience in neutron or synchrotron scattering techniques (e.g., diffraction or small angle scattering). Strong written and oral communications skills are desirable. The candidate must be willing to work in a team environment on technically and scientifically challenging problems. Applicants cannot have received the most recent degree more than five years prior to the date of application appointment and must complete all degree requirements before starting their appointment.



HOW TO APPLY: Qualified applicants must apply online at https://www2.orau.gov/ORNL\_POST/. Technical questions regarding the position can be directed to Dr. Xun-Li Wang at wangxl@ornl.gov. Please include the requisition number and title when corresponding. This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE).

Texas State University-SanMarcos Biology/Electrical Engineering/Chemistry/Physics Faculty Search

#### Molecular Biology and Bio/Nano Structures and Devices Posting #2010-57

Texas State University is aggressively developing a new Materials Science and Engineering program organized around the Departments of Physics, Chemistry & Biochemistry, Biology, Engineering Technology and the Ingram School of Engineering. We invite applications for three open positions to be immediately filled by outstanding candidates with research efforts in a broad sense enabling the integration of biological and nanoscale structures within device architectures. Areas of interest include novel interactions between biomolecular and inorganic/semiconductor device components; molecular or biological scaffolds; novel material modification at the nanoscale to minimize nonspecific adsorption and/or facilitate the attachment of biomolecular recognition elements; and synthesis of modified biomolecules for altered cellular function and specific recognition leading to destruction of harmful cells (e.g., antibiotic resistant bacteria, cancer cells).

An earned PhD degree in the physical, biological, engineering, or biomedical sciences is required. Rank and tenure status are negotiable based on qualifications, with the expectation of one position at the assistant professor level and two at the associate/full professor level. One position will reside in electrical engineering, one in biology, and third home department negotiated based on qualifications. The successful applicant(s) will establish a vigorous externally funded research program, supervise graduate students, collaborate with other faculty, and be committed to teaching at the undergraduate and graduate levels. While all positions provide competitive salaries and start-up packages, one senior-level position is funded through a State of Texas Emerging Technology Fund Research Superiority Acquisition Award. Preference for this position will be given to truly outstanding candidates from outside the state of Texas whose research efforts have a high likelihood of supporting technology transfer and commercialization.

Texas State is a doctoral-granting university located in the burgeoning Austin-San Antonio corridor, the largest campus in The Texas State University System, and among the largest in the state. Texas State's 30,000 students choose from 101 bachelor and 88 master's and 9 doctoral programs offered by eight colleges. With a diverse campus community including over 33% of the student body from ethnic minorities, Texas State is one of the top 20 producers of Hispanic baccalaureate graduates in the nation. Additional information about Texas State and its nationally recognized academic programs is available at http://www.txstate.edu.



Applicants will hold an earned doctoral degree and possess a record of intellectual and academic accomplishments in the described areas that will qualify her or him for appointment at the appropriate level in the appropriate academic department. Other required qualifications include a strong record of funded research, and a strong record of scholastic achievement. Industrial or commercialization experience is highly desired.

#### Application:

To ensure full consideration, submit the following via email before **March 31, 2010**—position will remain open until filled: Faculty application (http://facultyrecords.provost.txstate.edu/ faculty-employment/application.html) and accompanying materials which should include a letter of intent, vita, statements of proposed research program, potential commercialization strategy, and teaching philosophy, and list of five references to **biomse@txstate.edu**. The submission must clearly state desired rank and department.

Texas State encourages recruitment and selection of employees without regard to race, color, religion, sex, age, or national origin, and we are committed to increasing the number of women and minorities in administrative and professional positions.



# MRS 2010 SPRING MEETING

### Meet Your Next Employer ....

Show off your talents to the world's most prestigious universities, laboratories and high-tech firms. FREE of charge to all MRS Members, the Career Center provides targeted employment opportunities to candidates seeking positions in the scientific community.

- Review open positions tailored to the materials research industry
- Interview with prospective employers
- Visit on-site recruitment booths and network with technical staff

### **Location & Hours**

Moscone West • Exhibit Hall (Level 1)

Monday, April 5 (Registration only) 1:00 pm – 4:00 pm

Tuesday, April 6 11:00 am -5:30 pm

Wednesday, April 7

11:00 am – 5:30 pm Thursday, April 8 10:00 am – 1:30 pm

For additional information, visit www.mrs.org/S10\_CareerCenter

Do the research to advance your career...visit the MRS Career Center in San Francisco!