



Senior Faculty Positions Multi-Scale Surface Engineering and Science

The University of North Texas has embarked on a major multi-year university initiative to hire new faculty and make major infrastructure improvements to enhance and expand research. UNT is seeking to fill multiple faculty positions, most at the senior level, to join with existing faculty to build at least eleven cross-disciplinary research clusters in strategically selected areas (<http://research.unt.edu/clusters/>). The new faculty members will have significant opportunity to shape expansion and growth of the clusters with additional hires in subsequent years.

The University of North Texas seeks applicants to fill two Associate and/or Full Professor positions as part of the multi-disciplinary Multi-Scale Surface Engineering and Science Research Cluster. Candidates will develop synergies to further strengthen the existing core emphases in: 1) Multiscale engineered surfaces by physical routes including ion and electron beam fabrication/modification; 2) Multiscale engineered surfaces by chemical routes including preparative mass spectrometry and atomic layer deposition; and 3) Multiscale engineered surfaces by hybrid routes including laser surface processing/texturing and physical/chemical vapor deposition. Candidates from experimental materials science, chemistry, or physics are sought with background in materials surface processing across multiple lengths scales; microstructure-property relationships; and materials design and development relevant to above core emphases. Candidates with a combined experimental and computational research programs will also be considered.

The positions require an earned doctorate in Materials Science and Engineering, Chemistry, Physics, or related field. An established record of scholarship with an active, externally funded research program and a substantial publication record are also required, as is a record of mentoring graduate students and of teaching excellence. A record of interdisciplinary activities is desired.

Salaries, benefits, and teaching loads are commensurate with a major research university. The home department of the faculty hired will depend on their particular research and teaching expertise and interests, although cross-departmental appointments are also possible and encouraged.

The University of North Texas (UNT) is the fourth largest university in the state, strategically located in Denton, Texas which is 35 miles north of both Dallas and Fort Worth. There are over 36,000 students registered in 97 bachelors, 101 masters, and 48 doctoral degree programs. The DFW area has more than six million people, with significant economic growth, numerous industrial establishments, and excellent school districts. UNT has recently embarked on a 10-year research strategic plan to reach tier one status, and is one of seven universities designated by the state as an "Emerging Research University."

Applicants must submit an online application to <http://facultyjobs.unt.edu/>. Screening of applications will begin on February 15, 2011 and will continue until the search is closed. For additional information and questions, please contact co-chairs of the search committee Narendra Dahotre (940-565-2031, Narendra.Dahotre@unt.edu) or Thomas Scharf (940-891-6837, Thomas.Scharf@unt.edu).

The University of North Texas is an AA/ADA/EQE committed to diversity in its educational programs.



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Assistant Professor (Tenure Track) of Materials Science for Sustainable Construction

The Department of Materials of ETH Zurich (www.mat.ethz.ch) invites applications for an assistant professorship in the area of materials science for sustainable construction, with special focus on interfaces, resilience, and durability.

The successful candidate will hold a PhD degree, preferably in Materials Science, Physics, or Chemistry, and has had several years of experience (possibly also obtained in industry) involving basic research in the area of longterm use of materials and their resulting property changes. The professor will be expected to establish close collaborative relationships (both theoretical and experimental) with other members of the Department of Materials as well as with members of the Departments of Architecture, Chemistry, Civil Engineering, or Physics. He or she will be expected to teach Materials Science students at both undergraduate level (in German or English) and graduate level (in English), and to give special courses for other disciplines.

Assistant professorships were established to promote the careers of younger scientists. The initial appointment is for four years, with the possibility of renewal for an additional two-year period and promotion to a permanent position.

Please apply online at www.facultyaffairs.ethz.ch. Your application should include your curriculum vitae, a list of publications, and a statement of your research and teaching interests. The letter of application should be addressed to the **President of ETH Zurich, Prof. Dr. Ralph Eichler**. The closing date for applications is **May 31, 2011**. With a view towards increasing the number of female professors, ETH Zurich specifically encourages qualified female candidates to apply.

MATERIAL SCIENTIST POSITIONS NanoSynthesis Ltd.

NanoSynthesis, a startup R&D company with strong ties to a major corporation, is located in Columbus, OH. We seek qualified candidates for material research scientist positions to begin immediately. Primary job duties include designing, assembly, and optimization of CVD synthesis system for continuous production of carbon nanotubes based on floating catalyst concept. Applicants must have PhD or equivalent degree in material science, physics, chemistry, chemical engineering, or a similar field; postdoctoral experience in a related area is strongly preferred. Prior experience in experimental lab work is required; knowledge of SWCNTs characterization methods is preferred, but not required. The initial appointment will be for one year, with possible extensions at company's discretion. US citizenship or permanent residency is required.

Applicants should forward a detailed CV, along with a list of publications, one-page statement of research interests, and contact information for three references to nanosynthesis@gmail.com.

UCLA

Tenured Faculty Position with Endowed Professorship Department of Materials Science and Engineering

The Department of Materials Science and Engineering in the Henry Samueli School of Engineering and Applied Science at the University of California, Los Angeles (UCLA) is conducting an intensive search for appointment to the Carol and Lawrence E. Tannas, Jr. Endowed Chair. The Chair is dedicated to the area of polymer electronics with emphasis on electronic information display devices. The individual appointed to this professorship will be a distinguished scholar with outstanding contributions in fields related to polymer electronics.

Applications or nominations accompanied by the candidate's CV, list of publications, and names of three referees should be sent by **March 31, 2011** to: Search Committee, Tannas Chair, The Henry Samueli School of Engineering and Applied Science, 3111 Engineering V, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90095.

The University of California, Los Angeles is an Equal Opportunity/Affirmative Action Employer and invites applications from women, minorities, and people with disabilities.

FACULTY POSITIONS School of Mechanical and Advanced Materials Engineering

The School of Mechanical and Advanced Materials Engineering, Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea (www.unist.ac.kr), invites applications for tenure-track or tenured faculty positions starting from July 1, 2011. Appointments can be at the assistant, associate, or full professor rank commensurate with the candidate's experience and accomplishments. The faculty positions are available in the School's main areas of emphasis: Carbon based Materials, Electronic Materials, Organic/Polymeric Materials, Ceramic Engineering, and all other fields related to Material Science & Engineering.

Responsibilities include teaching at the both undergraduate and graduate levels, supervision of graduate students, the development of an actively funded research program of the highest quality, and service activities. Required qualifications include a PhD or equivalent degree, a demonstrated ability or the potential for outstanding teaching in English, and a demonstrated excellence in research as appropriate to the candidate's rank. Desired qualifications include ability to collaborate with researchers in the school and the university on multidisciplinary research initiatives.

About Ulsan National Institute of Science & Technology (UNIST)

UNIST is a recently established Korean national engineering school strongly supported by the Korean government and the city of Ulsan, which is well known as one of the top four Asian industrial cities. UNIST has been aiming to become one of most prominent national universities of Korea and also one of the leading global universities in science and technology, and has already established cornerstones for the success of this aim, consisting of interdisciplinary research, world-class research infrastructure (ucrf.unist.ac.kr/main2/index.htm), national top class faculties (ranked #1 of the research proposal acceptance rate for Korean government (the Ministry of Education, Science and Technology) funded programs in 2010), Korean top-class students, and excellence in educational system.

Applicants must submit their applications electronically, including: (1) curriculum vitae with full list of publications, (2) statement of research interests, and (3) at least three references submitted at the website: www.unist.ac.kr/invite/pro/eng/invite_proeng_main.jsp. Please feel free to call +82-52-217-2324 or email the Faculty Search Committee, School of Mechanical and Advance Materials Engineering, UNIST, Ulsan, Korea at jbaik@unist.ac.kr.



UNIST
Ulsan National Institute of
Science and Technology

UC DAVIS

UNIVERSITY OF CALIFORNIA

FACULTY POSITIONS Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering at the University of California, Davis invites applications for multiple faculty positions at all levels with a research focus on either: 1) physical electronics related to novel materials, structures, and devices, particularly nanoscale, biomolecular, and self-assembled approaches related to biology/medicine, information processing, and energy; or 2) microwave, millimeter-wave, and terahertz electronics related to devices, circuits, and systems. For the second area we are particularly interested in semiconductor electronic devices, MEMS, electromagnetics, antennas, circuits and systems related to chemical/biological spectroscopy, biomedical imaging/detection, gigabit wireless communications, remote sensing, energy harvesting, and sensors.

Candidates must have a PhD degree or equivalent, a commitment to teaching and service, and a potential for attracting significant extramural research support. For full consideration, applicants should apply by **February 28, 2011**. The positions remain open until filled. Additional information and application instructions can be found at <http://www.ece.ucdavis.edu/>.

UC Davis is an affirmative action/equal opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, individuals with disabilities, and veterans.



ABENGOA RESEARCH

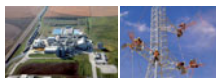
www.abengoa.com

Abengoa, an international company that applies innovative technology solutions to sustainability in the energy and environment sectors, seeks for its R&D unit Abengoa Research:

Senior Researchers

To lead R&D programs in the fields of:

- Fluid mechanics
- Solid mechanics and structures
- Thermal engineering
- Process (systems) engineering
- Electrical engineering
- Materials and nanotechnology
- Bioenergy/biomass



Focused preferably on energy and environment.

Our goal is to employ talent, building-up a multidisciplinary team of advanced engineering research located in Seville (Spain).

Requirements:

- PhD Engineers.
- Highest level of research capacity.
- Significant international experience in prestigious entities in this field (preferably USA).
- Recent publication and/or patent activity.
- Minimum experience of 7 years in R&D.
- English fluency.
- Academic and company R&D experience are an advantage.

To apply for this position, please send resume to abengoaresearch@abengoa.com

MontanaTech

THE UNIVERSITY OF MONTANA

DIRECTOR: Center for Advanced Mineral and Metallurgical Processing

Montana Tech is accepting applications for the position of Director, Center for Advanced Mineral and Metallurgical Processing. The Center conducts approx. \$3 million/year of metallurgical and materials research 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.

Minimum qualifications include a PhD degree in a relevant science or engineering discipline plus at least seven years of technical and personnel management experience in an academic or industrial research setting. Equivalent education and experience may be considered in lieu of the doctoral requirement. The salary range is \$90K-\$120K commensurate with experience. Review of applications will begin on **March 21, 2011**. Applicants must be U.S. citizens or permanent residents. The full position description, required qualifications, and application instructions are posted under the Academic Faculty/Professional heading at www.mtech.edu/employment.

EEO/AA

MICHIGAN STATE UNIVERSITY

Research and Development Director MSU Bioeconomy Institute

With the very generous endowment support of regional donors to the Community Foundation of the Holland-Zeeland Area (CFHZA), Michigan State University (MSU) seeks a Research and Development (R&D) Director for the MSU Bioeconomy Institute in Holland, Michigan.

The successful candidate will:

- Bring substantial industrial experience, bioeconomy-related research expertise, and personal leadership to a young, entrepreneurially focused organization, with the aim of establishing nationally recognized R&D excellence relevant to private sector needs.
- Recruit and maintain an internationally competitive, personally led R&D group.
- Actively oversee the development of a diverse set of other independent R&D groups led by colleagues.
- Liaise with corporate, economic development, government, and higher education collaborators, with the aim of ensuring that Institute programs support the emerging regional, state, and national bioeconomy.
- Develop a sustainable funding base for Institute research through energetic and successful solicitation of peer-reviewed grants, cooperative research agreements, and industrial affiliate group memberships.
- Build appropriate, mutually beneficial collaborative relationships with faculty and units on the MSU campus and at other MSU sites throughout Michigan.

Compensation will be competitive and commensurate with experience. Faculty appointment at an appropriate rank in any of several MSU colleges and schools/departments will be considered for interested candidates with requisite credentials.

Institute Background: In December 2007, Pfizer donated a modern, 138,000-square-foot research and development building with extensive chemical pilot plant production capabilities to MSU. MSU received possession of the Institute on March 14, 2009. The research component of the facility offers more than 31,000 square feet of modern labs with traditional and walk-in chemical fume hoods, a 105-seat auditorium, library space, plus professional and staff offices. The pilot plant contains stainless steel, glass-lined, and Hastelloy® reactor vessels with an aggregate 25,000-liter capacity, plus seven dryers, a Foxboro DCS control system, a glycol heat transfer medium system for temperature control, centrifuges, Niagra filters, and vacuum sources.

MSU has contracted with Lakeshore Advantage Corporation, the regional economic development organization, to manage a start-up company incubator in one wing of the building. Current tenants pursue opportunities in biocomposites, biofuels, and specialty chemicals. In addition to the \$5M+ CFHZA endowment for the support of the R&D Director, \$4.8M has been received to date for the Institute in proposal-based grants from the Michigan Strategic Fund.

For information about the Institute and this search, please visit <http://research.msu.edu/stories/msu-holland-facility-offers-rd-pilot-plant> or call MSU at 517-432-4499. Nominations and applications, including curriculum vitae and references, may be sent to the search committee, c/o Brenda Hoten, at hoten@msu.edu.

MSU is an Affirmative Action/Equal Opportunity Employer. MSU is committed to achieving excellence through cultural diversity. The university actively encourages applications and/or nominations of women, persons of color, veterans, and persons with disabilities.



SCIENTISTS / ENGINEERS Electronics Materials Branch

The Electronics Materials Branch at the Naval Research Laboratory in Washington, DC, seeks exceptional scientists and engineers with a background and demonstrated record of productivity in one or more of the following areas:

- Growth: MBE, ALD, CVD, and assembly of nanomaterials; esp. C-based nanomaterials and quantum dots
- Processing, esp. sub-micron
- Characterization: surface science, spectroscopy, electron transport
- Applications: nanoelectronics, energy harvesting, plasmonics, sensors, quantum information
- Theory, Semiconductors, Nanoscience, and Quantum information

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 at any level from senior level scientists to postdocs. A PhD degree in science or engineering is preferred. NRL requires employees to be capable of obtaining and maintaining a security clearance. CVs and a one page statement of research interests should be sent to 6870positions@ccs.nrl.navy.mil. Please indicate area of interest and include your name in the filenames of the files sent. 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. More information can be found at www.nrl.navy.mil/estd/6870.

The Naval Research Laboratory is an Equal Opportunity Employer.

Research Positions Materials Science and Engineering



The Department of Materials Science and Engineering at Boise State University is currently seeking to fill two research positions at the Center for Advanced Energy Studies (CAES) in Idaho Falls, Idaho.

Position One—Senior Technician: The ideal candidate will have expertise in metallography and sample preparation for optical and electron microscopy and will have five or more years experience handling radioactive materials in gloveboxes.

Position Two—Assistant/Associate Research Professor: The ideal candidate will have expertise and a demonstrable research track record in atom probe analysis with five or more years experience handling radioactive samples. An earned PhD degree in materials science or a closely related field is required. Additional experience in transmission electron microscopy (TEM) is also desirable.

With approximately 20,000 students, Boise State is the largest university in Idaho and is home to a thriving and energetic MSE program within the College of Engineering, which is experiencing tremendous growth and enjoys support from the Intermountain West's high-tech industry. Idaho Falls is located in the high country of southeastern Idaho, just 110 miles from Yellowstone National Park, and offers convenient access to world-class outdoor recreation.

Review of applications will begin **April 11, 2011** and will continue until the position is filled. Interested applicants should submit cover letter, CV, and contact details of three references to mse@boisestate.edu. Additional details are available at <http://coen.boisestate.edu/mse/Opportunities.html>.

EEO/AA Institution; Veterans preference may be applicable.

DIRECTOR

Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE)

Cornell University, located in Ithaca, New York, is an inclusive, dynamic, and innovative Ivy League university and New York's land-grant institution. Its staff, faculty, and students impart an uncommon sense of larger purpose and contribute creative ideas and best practices to further the university's mission of teaching, research, and outreach.

A search has begun for a new director of the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). CLASSE is a major interdisciplinary research center whose mission includes the study of beam physics, photon science and particle physics. CLASSE has extensive resources that support its research mission. These include Newman and Wilson laboratories, their facilities, shops and computing infrastructure, the Cornell Electron Storage Ring accelerator complex, the CHESS National X-ray facility, and the supporting technical and administrative staff. A principal current focus of CLASSE is the development of an Energy Recovery Linac (ERL) as a next generation light source. At the same time, CLASSE continues to facilitate an array of other research projects in accelerator physics, photon science, and theoretical and experimental particle physics. CLASSE infrastructure and personnel are supported primarily through research grants.

The CLASSE Directorship is a dual appointment, as the chief executive officer of the Laboratory and a senior tenured member of the Cornell faculty with academic responsibilities in the Physics Department or one of the other academic units with significant faculty and student involvement in CLASSE based activities. The CLASSE Director is responsible for the management of the laboratory's administrative infrastructure, staff and research facilities so as to best support and promote the success of the broad range externally sponsored research projects that are carried out by the faculty and staff associated with CLASSE and that utilize CLASSE resources. The Director works in close consultation with the PIs for the major CLASSE projects to ensure the availability and proper allocation of resources necessary for success.

The Director is the principal advocate and ambassador for the evolving CLASSE programs and he or she is expected to articulate and promote that scientific vision within the university, at the federal funding agencies, particularly at NSF and DOE, and with the NY State and Federal legislatures and administrations. The Director is expected to maintain a national and international presence on review panels and advisory boards, and to keep well apprised of national and international developments in the fields of photon science and accelerator physics that could significantly impact current and future CLASSE projects and programs. The Director also has oversight responsibility for the graduate and postdoctoral educational mission of CLASSE and for its educational outreach activities.

Ph.D. required with a background in Physics or other appropriate discipline. The search committee welcomes applications or nominations for this position, preferably accompanied by curriculum vitae and other information bearing on the candidate's qualifications for the Directorship. Relevant qualifications include scientific stature, leadership, and management skills.

Applications will be accepted until the position is filled, however interviews will begin as soon as qualified applicants are identified. Applications and nominations should be sent to **Deborah Shigley, Research Division HR, 222 Day Hall, Cornell University, Ithaca, NY 14853**; or by e-mail attachment to dks7@cornell.edu



Cornell University
*Cornell University is an affirmative action/
equal opportunity employer and educator.*