# PROGRAM PROPOSALS International Center for Materials Research University of California, Santa Barbara

The International Center for Materials Research at UC Santa Barbara is seeking program suggestions for its 2009–2010 activities, including:

- Two-week summer schools, at UC Santa Barbara or elsewhere, aimed at graduate students and/or junior researchers.
- One-week workshops or conferences, designed to bring together leading experts and junior researchers in a particular field.
- International exchange of graduate students and junior researchers
- Longer term thematic research programs, incorporating multiple activities and exchanges, centered around a specific materials research problem.
- We also encourage innovative new ideas in any area that connects broadly to materials research.

Proposals should contain a title, a paragraph or two explaining the idea, suggested organizers, key program participants, proposed dates, location, and an approximate budget. Criteria for the selection of programs include intellectual significance, timeliness, availability of outstanding and diverse participants, a need for international collaboration, expertise outside of the US and broader impacts, such as training international students, contribution to a pressing international problem, potential for engaging the wider community, and potential for broadening participation of underrepresented groups.

The ICMR Director, Nicola Spaldin (805-893-7920; nicola@mrl. ucsb.edu), or Program Coordinator, Jennifer Ybarra (805-893-5850; ybarra@mrl.ucsb.edu), will be pleased to discuss any ideas or questions. Decisions on 2009–2010 programs will be made at the Steering Committee meeting in March 2008; proposals and suggestions should be received before then to ensure full consideration.

# TENURED OR TENURE-TRACK FACULTY POSITION Materials Science and Engineering University of Minnesota

The Department of Chemical Engineering and Materials Science at the University of Minnesota seeks to fill a faculty position in Materials Science and Engineering. The position is open at the Assistant (tenure-track), Associate, or Full Professor levels. The department will consider outstanding candidates in any area of Materials Science. Assistant Professor candidates should have a distinguished academic record (including a PhD degree), outstanding potential to establish an independent research program, and a commitment to teaching in a highly interdisciplinary department. Associate and Full Professor candidates should have several years of teaching and/or research experience.

Applications should be submitted on-line, and consist of a CV (including a list of publications), a research plan, a teaching plan, and a list of three references with contact information (including email addresses). Submit applications at https://employment.umn.edu. Search for requisition number 152025 for Assistant Professor applications and 152031 for Associate/Full Professor Applications. Information on the department is available at www.cems.umn.edu. Review of the applications will begin on January 1, 2008, and continue until the position is filled. It is hoped that the successful candidate will be in place by Fall 2008.

The University of Minnesota is an equal opportunity educator and employer











# RESEARCH PROFESSOR NANOSCALE ELECTRONICS/PHOTONICS (TENURE TRACK)

Competition: DS 07-05

Within the framework of its Énergie, Matériaux et Télécommunications centre's strategic research programs, the Institut national de la recherche scientifique (INRS), a world-renowned university centre with programs at both graduate levels (M.Sc. and Ph.D.), is inviting candidates to apply for a tenure-track professor-researcher position in nanoscale electronics/photonics.

**PLACE OF** INRS-Énergie, Matériaux et Télécommunications,

**EMPLOYMENT:** Varennes (Québec)

**WORK** French is the working language. **LANGUAGE:** Knowledge of English is essential.

**SALARY:** In accordance with the collective

agreement in effect at INRS.

All applications will be treated confidentially. Interested applicants should forward a complete curriculum vitæ by e-mail and registered mail, a copy of their 3 most representative publications, a 1 to 2 page description of their research interests, as well as the names and addresses of 3 references **before March 7, 2008**, indicating competition DS 07-05 to:

# Director

INRS-Énergie, Matériaux et Télécommunications 800, de la Gauchetière Ouest, suite 6900 Montréal (Québec) H5A 1K6

Or to:

concours@emt.inrs.ca

For further information, please visit our Web site at: www.emt.inrs.ca

INRS adheres to the principle of work equality. In accordance with Canadian immigration laws, Canadian citizens and residents will be given priority for this position.



Institut national de la recherche scientifique

www.emt.inrs.ca



FACULTY POSITION School of Materials Science and Engineering Clemson University

The School of Materials Science and Engineering is seeking an outstanding tenure-track faculty member in any area of materials science and engineering, but especially within the areas of polymer fibers, ceramics, and electronic materials. Candidates must hold a PhD degree in materials science and engineering or related discipline, have demonstrated a distinguished record of prior research accomplishments, and be prepared to develop an innovative research and educational program. Successful candidates will be expected to attract external funding, lead independent research at the cutting edge of their field, and teach undergraduate and graduate courses. An amplified description of the School and this position can be found at mse.clemson.edu.

All applications must be submitted electronically. Qualified applicants should send: 1) a current vitae; 2) a detailed document summarizing research philosophy, planned future research activities, and how they expect to complement and extend the capabilities of current faculty and programs; 3) a description of teaching philosophy including undergraduate and graduate course competencies and how they would fit into the present academic programs; and 4) names and addresses of three references. Items 2 and 3 should not exceed four pages.

This information should be submitted in a single email to msesearch@clemson.edu. Questions should be sent to Dr. Chris Cole, Chair, Search and Screening Committee, cwjrv@clemson.edu. Review of applications will commence on **January 1, 2008**, with full consideration being assured to applications received by this date. Screening will continue until the positions are filled.

Clemson University is an AA/EEO employer and does not discriminate against any person or group on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran status.

Women and minorities are especially encouraged to apply.

# FACULTY POSITIONS Department of Materials Science and Engineering The Henry Samueli School of Engineering and Applied Science University of California, Los Angeles

The Department of Materials Science and Engineering at the University of California, Los Angeles, invites applications for tenure-track faculty position(s) in the following areas:

- Nanostructural Materials
- Electron Microscopy
- Soft Materials

Exceptional candidates in other areas of materials research will also be considered. Candidates must have demonstrated outstanding originality, ability, and breadth through research accomplishments. They should also demonstrate the potential for excellence in teaching at the undergraduate levels. Please send resume, references, and information on research and career interests to: Faculty Recruiting Committee, Department of Materials Science and Engineering, 3111 Engineering V, University of California, Los Angeles, P.O. Box 951595, Los Angeles, CA 90095-1595: www.seas.ucla.edu//ms/.

UCLA is an Equal Opportunity Employer

# **MULTIPLE FACULTY POSITIONS**



# Kazuo Inamori School of Engineering New York State College of Ceramics at Alfred University

The School of Engineering at Alfred University seeks five or six faculty, including three Inamori Professors, with start dates as early as Fall 2008. This cluster hire represents a significant expansion of our materials program, and will focus on research and graduate education.

# The Inamori Professorships

The tenured Inamori Professorships are endowed and include discretionary funds. Candidates will have an international reputation in the general area of advanced ceramics, with a demonstrated record of extramural research funding. The Inamori Professors will be expected to take leadership roles in the research programs of the School to build internationally recognized research programs that leverage existing strengths in ceramics, glass, and biomaterials.

# Assistant/Associate Professors

Two or three appointments are anticipated. Candidates will be expected to develop strong externally funded research programs and high quality teaching portfolios. Preference will be given to candidates with expertise in advanced structural materials, complex oxides/electroceramics, advanced ceramic processing, characterization, and glass and disordered materials.

AA/EOE



Interested persons should send a complete resume, including the names of at least three references, to:

A. N. Cormack, Dean, School of Engineering New York State College of Ceramics

**Alfred University** 

2 Pine Street Alfred, NY 14802 USA Phone: 607-871-2422 Fax: 607-871-2354 E-mail: cormack@alfred.edu

Applications will be accepted until all the positions have been filled

### **Electrical and Systems Engineering**



The University of Pennsylvania seeks outstanding individuals for tenure-track or tenured faculty positions in the Department of Electrical and Systems Engineering to start July 1, 2008. Applicants must have a Ph.D. in Engineering or equivalent fields. Suitable candidates in the areas of modeling, design, fabrication and characterization of nanostructures and devices (e.g., nanophotonic, nanophononic, nanoelectronic, molecular electronic or other novel computational devices and systems) will be considered.

Candidates should be prepared to collaborate with faculty in appropriate related areas such as materials science, bioengineering, physics, chemistry, chemical engineering, and/or mechanical engineering. The University seeks individuals with exceptional promise for, or proven record of, research achievement who will excel in teaching undergraduate and graduate courses and take a position of international leadership in defining their field of study.

Interested persons should submit an application by following the instructions posted at the Faculty Recruitment Web site at:

#### http://www.ese.upenn.edu/jobs

The University of Pennsylvania is an Equal Opportunity Employer. Minorities/Females/Individuals with Disabilities/Veterans are encouraged to apply.



# MICROFABRICATION CLEANROOM MANAGER Northwestern University

Northwestern University invites applications for the Microfabrication Cleanroom Manager position on the Evanston, IL campus. The University and the McCormick School of Engineering have made a commitment to establish a new microfabrication cleanroom facility in order to meet future research needs in the areas of: nanoscience, nanotechnology, and MEMS. The facility is currently in the planning stages and expected to be completed within 18 months. The manager will work closely with administration and faculty members to facilitate laboratory design, space renovation, facility planning, equipment purchase, and installation. Once the cleanroom is in operation, the manager will work with staff members, faculty, and students to maintain the facility and equipment, manage day-to-day research and development activities, and train users. A successful candidate is expected to meet the following qualifications:

- Five years of work experience in a microfabrication facility, preferably working in a facility manager capacity.
- Master's degree (or higher) in engineering or physical sciences.
- Research experience in MEMS and nanofabrication preferred.

The cleanroom will provide critical nanofabrication capabilities to Northwestern University. The University has several national research centers dedicated to nanoscience and nanotechnology research, including the NSF Nanoscale Science and Engineering Center, NIH Center for Cancer Nanotechnology Excellence, National Center for Learning and Teaching in Nanoscale Science and Engineering, NSF Material Research Science and Engineering Center, and the Institute of Bionanotechnology in Medicine.

All resumes for this position must be received through the electronic recruiting system, eRecruit. For considerations, use the following link—http://www.northwestern.edu/hr/careers. To apply for this position in eRecruit, enter the Job Opening ID Number 11390 or the position title in the appropriate search field. Once you apply, you will receive an email confirming submission of your resume.

Northwestern University is an Equal Opportunity, Affirmative Action Employer. Members of historically underrepresented groups are strongly encouraged to apply.



# ASSISTANT PROFESSOR Department of Engineering Mechanics University of Nebraska-Lincoln

The Department of Engineering Mechanics, University of Nebraska-Lincoln, invites applications for a tenure-track position at the Assistant Professor level for candidates with research experience or strong interest in cell/tissue biomechanics (mammalian or plant), nanodevices, bioMEMS/NEMS, nanomechanics/materials/manufacturing/fluidics, biomaterials, and bionanomechanics. Exceptional candidates could be considered for a higher rank.

#### **QUALIFICATIONS:**

Doctoral degree in Mechanical Engineering or Engineering Mechanics, Bioengineering, Biomedical Engineering, Materials Science, or other relevant field of engineering or applied science is required. The successful candidate will have strong potential for developing a leading edge externally funded research program in his or her field and commitment to teaching at both the undergraduate and graduate levels. The Department seeks visionary candidates interested in developing research programs in new emerging fields and candidates capable of participating in or leading new multidisciplinary research and educational initiatives; e.g., new programs linking engineering with biology or biomedicine.

# - DEADLINE:

Application review and interviewing will start as soon as qualified applications are received. Applications received before **January 15**, **2008** will be given primary consideration; however, later applications will be considered until the position is filled.

#### **APPLICATIONS:**

To be considered for the position, please complete the Faculty/ Academic Administrative Form at https://employment.unl.edu (requisition 070879) and then send vitae, letter of application, a brief vision statement describing research and teaching interests, and names, addresses, e-mails, and telephone numbers of at least four professional references to:

Yuris Dzenis, Search Committee Chair Department of Engineering Mechanics University of Nebraska-Lincoln; Lincoln, NE 68588-0526

We assure reasonable accommodation under the Americans with Disabilities Act; contact Yuris Dzenis at 402-472-0713 for assistance. For additional information, see the Department of Engineering Mechanics on the web at: http://www.unl.edu/emhome/.

The University of Nebraska is committed to a pluralistic campus community through affirmative action and equal opportunity and is responsive to the needs of dual career couples.



# MRS 2008 SPRING Career Center

For details see page 62



# **FACULTY POSITIONS**

Materials Science and Engineering Florida State University



# Continuing Cluster Hire Initiative in Growth, Processing, and Characterization of Advanced Materials

In 2006, Florida State University announced a new faculty Cluster Hiring Initiative in the **Growth, Processing, and Characterization of Advanced Materials** (http://pathways.fsu.edu/faculty/gpcam/) as part of FSU's Pathways of Excellence Initiative (http://pathways.fsu.edu/). Inaugurated in the fall of 2005, the Pathways program leverages the University's unique strengths with significant new investments in research and graduate education. This initiative is designed to hire faculty who are national and international leaders in their respective fields, or are on a clear trajectory to be so, and who work effectively in an interdisciplinary team with common intellectual goals.

The **Growth, Processing, and Characterization of Advanced Materials Cluster** is interdisciplinary, blending many engineering disciplines with chemistry, physics, and computational sciences, with a goal of bridging the most basic science at the nanoscale with large scale applications of new technologies. This hiring initiative is part of an emerging effort in Materials Science & Engineering at FSU, which includes new interdisciplinary graduate degree programs and a new Materials Research Building, now under construction at the Florida State University Innovation Park site in close proximity to the College of Engineering (www.eng.fsu.edu), the National High Magnetic Field Laboratory (http://www.magnet.fsu.edu/), the Applied Superconductivity Center, the High Performance Materials Institute (http://www.hpmi.net/), and the Center for Advanced Power Systems (http://www.caps.fsu.edu/).

The new hires will join two recent additions to the Cluster faculty, complementing present faculty at FSU who are active in a broad spectrum of materials research. FSU is now accepting applications and nominations for up to four cluster positions:

- 1) A senior faculty position with expertise in the growth and characterization of oxide thin film materials;
- 2) A senior faculty position with expertise in the engineering of nano- and bio-devices, processing of nanocomposites, and advanced polymer and composite engineering;
- 3) A junior faculty position to lead the physical sciences transmission electron microscopy initiative. FSU has committed resources for the purchase of a forefront imaging and analytical resource that will be state of the art. Strong parallel support for the TEM facility comes from the Departments of Chemistry, Physics, Mechanical, and Industrial & Manufacturing Engineering, and the Applied Superconductivity Center and National High Magnetic Field Laboratory; and
- 4) A junior faculty position with expertise in nano-manufacturing, advanced materials processing, multifunctional materials development, and modeling and/or computation in materials and manufacturing. The person is expected to bring skills and expertise complementary to existing High Performance Materials Institute capabilities.

The Cluster faculty will be key members of the developing graduate materials programs at FSU and will have many opportunities to collaborate widely on campus across disciplinary and departmental boundaries. Senior candidates must have a clear international standing, an exceptional record of publishing and external funding, and a demonstrated record of scientific leadership. Junior candidates must demonstrate progress towards similar achievements. All candidates should have the appropriate terminal degree and the ability to teach at the graduate level in Materials Science & Engineering. The Cluster will favor candidates with strong communication skills and the ability and commitment to work in synergistic, interdisciplinary research programs. Appointees will be tenured or tenure-earning in an academic department to be determined during the hiring process.

Nominations should include the name, address, telephone, and email contacts for the nominee along with a brief letter addressing the nominee's qualifications. Applicants should submit a letter of interest which describes their areas of research and teaching, complete curriculum vitae, and the names and contact information of at least three references. The review of applications will commence on **February 15, 2008**, and will remain open until all positions are filled.

Letters of nomination or application should be addressed to clusterhirechair@eng.fsu.edu. Only electronic applications will be accepted.

Florida State University is an Equal Opportunity/Access/Affirmative Action Employer.

# SENIOR FACULTY POSITION **Department of Physics Binghamton University**

The Department of Physics, Applied Physics, and Astronomy at Binghamton University seeks outstanding applicants for a senior faculty position at the rank of Associate Professor or Full Professor to enable continued growth of its research programs in the areas of Condensed Matter and Materials Physics. Applicants with interests in the energy sciences, information sciences, and biophysics are especially encouraged. The successful applicant will have a strong record of generating external funding for their research program and provide leadership for the PhD program in Materials Science, which the department co-directs, and the planned PhD program in Physics. Binghamton University emphasizes high quality research and a commitment to excellence in graduate and undergraduate education.

The university has made substantial investments to its research infrastructure, including funding of the Innovative Technologies Complex with over \$20M in state-of-the-art analytical equipment and the Center for Advanced Microelectronics Manufacturing with greater than \$30M in roll-to-roll processing equipment. Both of these facilities complement a \$2M nanofabrication facility being constructed in the Department of Physics.

Applicants should submit a full vita, statement of research, statement of teaching philosophy, and list of three references to: Eric J. Cotts, Chair, Physics Department, Binghamton University, PO Box 6000, Binghamton, NY 13902 (Electronic submission of material in the form of one pdf file: physics@binghamton.edu). The selection process will begin January 15, 2008 and continue until the position is filled.

Binghamton University is an affirmative action/equal opportunity employer. Members of minority groups and women are especially encouraged to apply.

# **ELECTRONICS ENGINEER** Geophysical Laboratory **Carnegie Institution of Washington**

The Geophysical Laboratory, Carnegie Institution of Washington, seeks applications for an electronics engineer who will be in charge of the Lab's electronics department. The primary responsibility includes operation of electron microprobe and scanning electron microscopes. This includes training and providing assistance to new and visiting users, performing routine maintenance, sample preparation, providing analytical support, and collaborating with staff and students. Other responsibilities are to assist staff scientists to solve electronics problems and to maintain smooth operation of various scientific instrumentation at the Lab. The Laboratory supports world-class facilities in high-pressure research; organic, stable isotope, and biogeochemistry; mineral physics and petrology; and astrobiology. See http://www.gl.ciw.edu/ for a listing of its research programs and facilities.

Applicant must have a bachelor's degree in engineering, applied science, or equivalent and four years of experience. Candidates with experience in microbeam analysis are encouraged to apply. Experience in using computerized control systems, electronic measuring equipment, test instrumentation, and data acquisition systems as it applies to Laboratory apparatus is desirable. Completed applications (including CV and names of two references) should be submitted to Russell J. Hemley, Director, Geophysical Laboratory, 5251 Broad Branch Road, NW, Washington, DC 20015-1305, USA, or email the applications to dappleby@ciw.edu indicating "electronics engineer position" in the subject line. The position is available immediately; applications will be reviewed until an appropriate candidate is hired.

The Geophysical Laboratory is an equal opportunity employer.

Naval Undersea Warfare Center (NUWC) Newport, Rhode Island 02841-1708

# Materials/Transduction Scientist Full-Time Position

The Devices, Sensors, and Materials R&D Branch, Naval Undersea Warfare Center (NUWC) Division Newport, is seeking a full-time highly motivated scientist to conduct basic and applied research in the area of electroactive materials characterization and transduction. NUWC Division Newport is currently investigating the electromechanical properties of ceramics and crystals under Naval operating conditions for a variety of potential application areas. NUWC Division Newport has state-of-the-art facilities for the determination of electroactive material properties as a function of applied temperature, stress and electric field. A doctorate in solid state physics, materials science, mechanical engineering, or related discipline with strong experience in materials characterization methodologies is required for this position. NUWC Division Newport also has state-of-the-art facilities for transduction science including transducer design, numerical analysis, structural mechanics and acoustics, underwater acoustic sensors, and electrostriction/piezoelectricity. Experience in transducer design, analysis, and testing methods is not a hard requirement, but will be considered a substantial plus and is highly desirable for this position. The ability to develop proposals for DoD funded programs is necessary as well as an ability to communicate effectively orally and in writing.

# U.S. Citizenship is required for this position.

The United States Government does not discriminate in employment on the basis of race, color, religion, sex, national origin, political affiliation, sexual orientation, marital status, disability, age membership in an employee organization, or other non-merit factor.

The position is a full-time position. Salary and fringe benefits are very competitive.

Please send or e-mail your resume to:

**NUWCDIVNPT** Recruiting Officer Human Capital Management Department (Code 118) Bldg. 126T 1176 Howell Street Newport, RI 02841 E-mail: HRInfo@npt.nuwc.navy.mil

Phone: (401) 832-6720



# DIRECTOR Center for Integrated Electronics Rensselaer Polytechnic Institute

Rensselaer Polytechnic Institute seeks outstanding candidates for the position of Director of the Center for Integrated Electronics (CIE). Candidates must have earned a PhD degree in an appropriate field, with accomplishments in developing and managing research programs that are commensurate with a faculty appointment at the level of full professor. Research accomplishments would be in one or more areas of microelectronics and photonics, microsystems architectures and design, devices, and materials and processing. Individuals should have demonstrated successful leadership positions in academia, industry, and/or government agencies.

The CIE Director will be expected to provide strategic vision for the technical directions of the research and the management guidance for the faculty, staff, and students. Of additional importance will be extensive efforts in the development of major research proposals and programs, collaboration with industry, and interactions with partnering universities and federal laboratories.

Rensselaer is a private, coeducational, technological university consisting of Schools of Architecture, Engineering, Humanities & Social Science, Management & Technology, and Science. Rensselaer's CIE is a major research center with approximately \$7 million of annual research expenditures. Its facilities include a 5700 square foot Class 100 clean room which supports wafer processing with micrometer and nanometer lithography capabilities on semiconductor wafer sizes from small pieces up to 8 inches. Additional information can be accessed at www.rpi.edu.

Applicants should submit a cover letter, resume, description of their interests and experience, and a statement summarizing their vision of future research opportunities in the field of micro- and nano-electronics and microsystems.

Applications and nominations will be accepted until the position is filled. Materials (and inquires) should be electronically submitted to: Dr. T. Paul Chow, Professor of Electrical, Computer, and Systems Engineering and Chair of the Search Committee, 3509@imsearch.com. Questions should be directed to Laverne Gosby, Associate, at Isaacson, Miller at 617-262-6500.

RPI welcomes candidates who will bring diverse intellectual, geographical, gender, and ethnic perspectives to Rensselaer's work and campus communities. Rensselaer Polytechnic Institute is an Affirmative Action/Equal Opportunity Employer.

# Director DOE Hydrogen Sorption Center of Excellence



The National Renewable Energy Laboratory (NREL), in Golden, Colorado, invites applications for the position of Center Director for the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy's Hydrogen Sorption Center of Excellence (Center) led by NREL. The Director provides leadership of the Center, currently comprised of 12 partners including national laboratories, industry, and universities from across the nation. The Center is an internationally recognized applied R&D effort to develop materials that could store hydrogen at close to ambient conditions for vehicular applications. The Center's goals include the design and synthesis of materials that reversibly bind hydrogen to enable greater than 300-mile vehicle driving range and to promote technology development in the hydrogen storage community.

**Leadership:** Provide strategic leadership for the Center, being its advocate with industry and government stakeholders and within the national and international scientific and technical communities. Effectively link R&D gaps and research plans to the goals of the DOE Hydrogen Program. Be the principal contact from the Center to DOE Headquarters. Have a firm grasp of the underlying physics and chemistry of hydrogen interaction with materials and translate that understanding into effective collegial leadership of the research teams within the Center

**Technical Management:** Lead the Center in developing R&D strategies and plans. Monitor research progress of the Center and provide results and recommendations to the DOE and NREL management. Organize the Center's participation in reviews of its R&D accomplishments. Provide technical support to the DOE for its management of the work scope for partners of the Center. Coordinate interaction and collaboration among partners of the Center as they conduct their R&D. Prepare annual budgets, briefing materials and operating plans.

Minimum Requirements: Ph.D. or equivalent experience in chemistry, physics, or related scientific discipline. A minimum 15 years of experience leading progressively complex, relevant technical assignments. Demonstrated ability to effectively lead, manage, motivate, and direct staff. Nationally recognized experience and superior achievement in chemistry, physics, nanostructured materials, or related areas. Demonstrated success in research program leadership and development. Demonstrated organizational, budgeting, negotiation, and facilitation abilities. Knowledge of DOE and other federal programs in chemistry, fundamental design of nanostructured materials as well as applied R&D and engineering activities.

# Complete details visit: www.nrel.gov/hydrogen\_director

For more information, contact Neil Conrad at (303) 384-7569 or email neil\_conrad@nrel.gov NREL is an equal opportunity employer and drug free workplace.

# MATERIAL SCIENTIST Idaho National Laboratory

Securing our energy future through science and engineering innovation.

The preeminent energy laboratory in the USA seeks a Material Scientist who can develop and lead a small team in an experimental program to develop phenomenological models of the interaction between advanced alloys and environments representative of energy systems at elevated temperature. The initial emphasis will be characterizing the interaction of creep resistant nickel based alloys with gaseous environments expected in very high temperature gas cooled nuclear reactors. Correlations will be developed between gas composition and exposure temperature and nature of the interaction with the environment. Experimental observations will be used to validate and potentially extend existing phenomenological models. The influence of environmental interaction on the mechanical properties of the materials will also be characterized.

In addition, this position will offer the opportunity to take a leadership role in developing new programs to investigate environmentally influenced cracking in light water reactor materials. As this program develops there will be the opportunity to develop programs in collaboration with the Advanced Test Reactor User Facility at the laboratory.

Requirements for consideration include a Bachelors degree in material science and engineering or related field with seven years related experience, a Masters degree and five years, or a Doctorate with three years related experience.

The Idaho National Laboratory is located in Idaho Falls, which offers a great lifestyle, low cost of living, safety, and access to some of the Western United States best recreational values. To find out more about the great opportunity and/or to apply, go to www.inl.gov, job posting #003578.

EOE

# **TEMPORARY POSITIONS** University of California, Los Angeles

A limited number of temporary positions (research engineers, postdoctoral scholars, lecturers) may be available in the following areas: materials science, ceramics, composite materials, and electronic materials. PhD degree or equivalent experience. Send inquiry to Faculty Recruiting Committee, Department of Materials Science and Engineering, 3111 Engineering V, University of California, Los Angeles, P.O. Box 951595, Los Angeles, CA 90095-1595.

UCLA is an Equal Opportunity Employer

# INTERNATIONAL RESEARCH FELLOWSHIP **International Center for Materials Research** University of California, Santa Barbara

The International Center for Materials Research (ICMR) at UC Santa Barbara announces its International Research Fellowship competition for the 2008–2009 academic year.

ICMR International Research Fellowships support research visits to non-US laboratories for graduate students, postdocs, and junior faculty affiliated with US Institutions. Typical durations are a few weeks to three months, with award amounts for travel and expenses of up to \$5000; we anticipate that the applicant will continue to receive their regular salary support from their home institution. Conference travel is not supported.

Application materials, consisting of a one-page description of the collaboration, a short CV, and (for students and postdocs) a letter of support from the advisor, should be sent to the ICMR Program Coordinator, Jennifer Ybarra at ybarra@icmr.ucsb.edu. Applications are welcome at any time, but should be received by March 2008 for fullest consideration. Our funding structure prioritizes collaborations with countries that are not in Western Europe.

The ICMR Director, Nicola Spaldin (805-893-7920; nicola@mrl.ucsb.edu), or Program Coordinator, Jennifer Ybarra (805-893-5850; vbarra@mrl.ucsb.edu), will be pleased to discuss any ideas or questions.



# **TENURE-TRACK POSITION** West Virginia University

As part of an ongoing, University-wide initiative to develop nanoscience based systems for biomolecule identification, West Virginia University invites applications for a tenured or tenure-track position in the broad area of Active Nanostructure-based Devices. The successful applicant will both lead creative discovery and contribute to collaborative research, with application to such areas as lab-on-a-chip, biomedical, and biosensor systems. Areas of specific interest include: integration of nanoscale electronic, photonic, and fluidic devices; and interaction of biomolecuar and inorganic/semiconductor device components.

A PhD degree in electrical engineering, physics, or closely related field with expertise in nanotechnology is required. The successful candidate will demonstrate the ability to develop a vigorous extramurally funded research program in this area, build effective collaborations, and demonstrate potential for excellence in teaching.

West Virginia University (www.wvu.edu) is a comprehensive land-grant research institution with comprehensive health sciences enrolling over 27,000 students in 113 degrees programs. WVNano (wvnano.wvu.edu) is WVU's nanoscale science, engineering, and education initiative. This initiative is a collaborative effort involving the Eberly College of Arts and Sciences, the College of Engineering and Mineral Resources, and the Schools of Medicine and Pharmacy. The successful candidate will serve an integral role within WVNano. Available through WVNano, in addition to start-up resources, are state-of-the-art chemical, biochemical, computational, growth, fabrication, microscopy, and characterization facilities.

Interested candidates must send a CV along with a letter of application, a statement of research interests and how they fit within the WVNano framework, a statement of teaching philosophy, and three letters of reference to Nano-Device@mail.wvu.edu. Review of completed applications will begin immediately and continue until the position is filled. For further information, contact Lawrence Hornak or Thomas Myers, WVNano Co-directors, at wvnano@mail.wvu.edu, or Fred L. King, Search Committee Chair, at fred.king@mail.wvu.edu (inquiries only).

West Virginia University is an affirmative-action, equal-opportunity employer dedicated to building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment. Applications are strongly encouraged from women, minorities, and individuals with disabilities.

# U·A·L·R

## RESEARCH ASSOCIATE **University of Arkansas** at Little Rock

The University of Arkansas at Little Rock seeks applicants to fill the position of Research Associate, Job #430. This fulltime, non-tenure track, 12-month appointment will carry a competitive salary and excellent benefits. The position will begin January 15, 2008 and is funded by a U.S. Department of Energy grant.

Description of Duties: The successful candidate will work with the nitride material group in the Department of Physics. The group has diverse interests including growth of nitride nanowires and nanorods; fabrications of optoelectronic and solar cell devices; characterization using x-ray diffraction and scattering; electron microscopy; photoluminescence and raman spectroscopy; photoconductivity property; and photovoltaic measurement.

Qualification Requirements: PhD degree in Physics, Chemistry, Material Science, or related field, or completion of degree requirements before employment commences, with a background in the chemical vapour deposition of epitaxial film. Experience with x-ray diffraction, photoconductivity, electron, and microscopy as well as computer data acquisition and instrument interfacing will be a plus.

To apply send a letter of application (referencing Job #430) stating qualifications and background for this position, curriculum vitae, and three professional references to: University of Arkansas at Little Rock, Attn: Dr. Keith Hudson, Director, Graduate Institute of Technology, 2801 S. University, Little Rock, AR 72204. Direct all technical inquiries to: hwseo@ ualr.edu. Direct all other inquires and applications to: gitpositions@ualr.edu or 501-569-8210. Subject line should reference the respective job number for which you are applying. Only complete electronic applications (PDF preferred) will be considered. Review of applications will begin immediately and will continue until the position is filled. Persons hired must provide proof of legal authority to work in the United States. Under Arkansas law, all applications are subject to disclosure.

The University of Arkansas at Little Rock is an equal opportunity, affirmative action employer and actively seeks the candidacy of women, minorities, and individuals with disabilities.



# PhD STUDIES Washington State University

Chemists, Engineers, and Physicists interested in a PhD in Materials Science: The Materials Science PhD Program at Washington State University welcomes BS and MS scientists and engineers to our highly interdisciplinary program. In addition to the usual support mechanisms (100% of our students are supported), we have a limited number of graduate school RAs for first year students. Visit www.materials.wsu.edu for more information and to apply on line.

# POSTDOCTORAL POSITION Florida State University

Postdoctoral position in sol-gel synthesis. The applicant must have prior experience in the fabrication of optical quality monolithic materials from tetraalkoxysilanes and organotrialkoxysilane reagents. Some facility in organic synthesis is desirable. Send resume to Dr. Albert E. Stiegman, Florida State University, Tallahassee, FL; email: stiegman@chem.fsu.edu.

AA/EEO



# FACULTY POSITIONS School of Engineering and Applied Sciences Harvard University

The Harvard School of Engineering and Applied Sciences (HSEAS) is initiating a major thrust in the broad area of energy science and technology and invites applications for tenure-track positions in this area. Interested candidates with expertise in materials science, applied chemistry, chemical engineering, and environmental engineering with a particular focus on energy-related applications are invited to apply. HSEAS offers a highly interdisciplinary environment that fosters collaboration within SEAS and with other parts of Harvard. The HSEAS effort will be part of a larger University-wide initiative on energy that aims to bring together scholars from Harvard's various schools (business, design, government, law, medicine, and public health) to make a significant contribution on energy-related challenges. Candidates should have an outstanding research record and a strong commitment to undergraduate teaching and graduate training. Applicants must have completed a PhD degree by September 1, 2008. Applications from qualified women and minorities are strongly encouraged.

Candidates should send a curriculum vitae, a list of publications, a statement of research and teaching interests, and up to three representative papers (ideally as a single PDF document) to: energy-search@seas.harvard.edu. In addition, candidates should have at least three letters of reference sent to the above address. Alternatively, material may be sent via surface mail to:

Energy Search Committee School of Engineering and Applied Sciences Harvard University Pierce Hall, 29 Oxford Street Cambridge, MA 02138

Applications will be reviewed as they are received. For full consideration, applications should be received by **January 31, 2008**.

Harvard is an Equal Opportunity/Affirmative Action employer



City University of Hong Kong invites applications for the following posts. Candidates with applied research achievements will receive very positive consideration. Relevant experience in business and industry will be a definite asset.

### Professor/Associate Professor/Assistant Professor Department of Physics and Materials Science [Ref. A/504/56]

Applications are invited from outstanding candidates for Assistant Professor and higher positions. The University endeavours to be internationally recognized as a leading university in the Asia-Pacific region. The Department of Physics and Materials Science was formed in 1993 as the first of its kind in Hong Kong, and already excels in several fields.

The Department seeks strong candidates in emerging fields that strengthen and expand its existing areas of focus. Particularly strong candidates are welcome in any field.

**Requirements**: A PhD in a closely related discipline with a promising research record and a strong teaching ability. The successful candidates are expected to develop new research directions and courses.

#### Salary and Conditions of Service

Salary offered will be highly competitive and commensurate with qualifications and experience. Appointment will be on a fixed-term gratuity-bearing contract. Fringe benefits include annual leave, medical and dental schemes, and housing benefits where applicable.

#### Application and Information

Information concerning 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, Hong Kong [Fax: (852) 2788 1154 or (852) 2788 9334/email: hrojob@cityu.edu.hk]. Additional information about the Department is available at http://www.ap.cityu.edu.hk/. Please send an application letter enclosing i) a current CV with evidence of teaching ability in English; ii) a concise (up to 1 page) statement of research interests and teaching philosophy to the Human Resources Office by email or by post. Applications will be considered until positions are filled. Please quote the reference of the post in the application and on the envelope. The University reserves the right to consider late applications and nominations, and to fill or not to fill the positions.

# University at Buffalo The State University of New York

# **Assistant Professor Materials Research**

The Department of Mechanical and Aerospace Engineering at the University at Buffalo, State University of New York, seeks an outstanding individual in the area of materials research for a tenure-track position at the Assistant Professor level. Candidates working at the frontiers of nano- or meso-scale materials research to develop novel multi-functional materials are encouraged to apply. Broad areas of inorganic, organic, or bio-materials that exploit new types of energy conversion principles are of particular interest. The successful candidate will be expected to develop an independent, externally-funded, internationally-recognized research program, teach graduate- and undergraduate-level courses, develop new specialized courses, supervise graduate research and contribute to departmental affairs. Information on the Department can be found at http://www.mae.buffalo.edu.

The School of Engineering and Applied Sciences at Buffalo is the largest and most comprehensive of the SUNY engineering schools. The Department of Mechanical and Aerospace Engineering has 25 full-time faculty. In the 2006:2007 academic year, the department conferred 197 BS, 62 Master's, and 11 Ph.D. degrees.

Applicants must have an earned doctorate in Mechanical or Aerospace Engineering or in a relevant science or engineering discipline with a dissertation focused on materials research. Applicants must submit an online application through the University at Buffalo Human Resources webpage at <a href="http://hr.buffalo.edu">http://hr.buffalo.edu</a>; select "Find Jobs at UB", select "Search & Apply for Jobs". This position is posting number 0601772. Applicants must submit a Cover Letter, detailed Curriculum Vita, Contact Information for References, Research Statement, and Teaching Statement. Optional attachments are a maximum of three separate publications Applications will be accepted until February 29, 2008. Women and other under-represented minorities are especially encouraged to apply.

The University at Buffalo is an Equal Opportunity/Affirmative Action Employer/Recruiter.



# PROFESSOR/ASSOCIATE PROFESSOR **Solid State Chemistry and Materials Science CRISMAT Laboratory**

University of Caen (UCBN) and Engineering School (ENSICAEN)

OPEN POSITIONS: Professor and Associate Professor in Solid State Chemistry and Materials Science. The CRISMAT (Crystallography and Materials Science), affiliated to CNRS and ENSICAEN, is a large research laboratory with 130 people. The main scope of activities is the design of new oxides to create new properties for applications. Both positions are available in the new materials group of the laboratory (30 people).

The successful candidates for the PROFESSOR position will have high skills in Solid State Chemistry with a doctoral degree and outstanding record of accomplishments in Materials Science. In particular, the candidates must be familiar with the research of new functional oxides with original crystallographic structures. A strong expertise in original synthesis routes together with an up to date background in diffraction techniques such as transmission electron microscopy are strongly requested. CRISMAT and the University of Caen Basse-Normandie (UCBN) are committed to excellence in both education and research. The successful candidate must show an established success in teaching inorganic chemistry and materials science at the undergraduate and graduate levels, and especially in attracting students to the Materials Science discipline. The candidate will be expected to establish strong links between ENSICAEN, University of Caen, and Companies.

The candidates for the **ASSOCIATE PROFESSOR** position will have a PhD degree in Solid State Chemistry (or Materials Science) and at least two years of postdoctoral research experience in new materials with electronic/magnetic properties. The research part will involve the use of synthesis and crystallography. Dedication to high quality teaching is also essential. The position includes teaching undergraduate and graduate courses in inorganic chemistry, materials science.

Interested candidates should submit their resume and applications, a statement of research and teaching interests, and a minimum of three references to:

Dr. Antoine Maignan; Laboratoire CRISMAT; UMR 6508 CNRS/ENSICAEN 6, Boulevard du Maréchal Juin; 14050 Caen Cedex 4, FRANCE antoine.maignan@ensicaen.fr

Evaluations of applications will begin on April 1, 2008. French speaking and writing skills are required.

## **CHAIR PROFESSORSHIP (W3) Computational Materials Science and Design Saarland University**

We are seeking to attract an individual with an excellent international reputation in materials science and engineering who has experience in modern fields of research such as:

- Design with hierarchical materials, material combinations, and biologically inspired materials
- Computational method development for microstructural design
- Computer-based simulation and calculation of complex 3D microstructures

Ideally, the candidate is eager to pursue interdisciplinary collaborations between the material science and engineering department at the Saarland University and adjoining engineering disciplines as far as computer science. The candidate is prepared and capable to cooperate with research institutes located in Saarbrücken that are close to the university, such as the Leibnitz Institute for New Materials (INM), Fraunhofer Institute for Non Destructive Testing, Fraunhofer Institute for Biomedical Engineering, and the Max-Planck Institute for Computer Science. He or she will also play an active role in international networks like CC-NanoBioNet, CC-NanoChem, and NanoBioNet e.V.

The successful candidate is expected to teach undergraduate and graduate courses in design and materials science and engineering and is actively supporting our international Bachelor (Atlantis) and Master level degrees (EEIGM and AMASE). Prerequisite for an appointment is the Habilitation or an equivalent qualification.

Women are encouraged to apply and will be treated favorably in case of equal qualification. This also applies to disabled candidates.

Applications, including CV and a statement detailing research and teaching interest, should be sent to: Prof. Ralf Busch, Chair, Metallic Materials, Campus C63, 66123 Saarbrücken, Germany. Review of applications will begin on January 25, 2008.

# **Princeton**University



# Princeton Institute for the Science and Technology of Materials (PRISM)

### ASSOCIATE DIRECTOR

Reporting to the Director of PRISM, you will be responsible for the operating budget, management of staff, as well as compliance of research and financial issues. You will take part in internal and external meetings and work with Institute faculty on short and longterm planning. Interact with other departments/centers/institutes on campus and work with Faculty Director of Certificate Program in Materials Science and Engineering to coordinate undergrad and graduate education efforts.

The position requires a Ph.D. in field related to materials and optics with research experience. Must have experience in leadership and management of research operations, research facilities, and/or research programs. Experience in the field of large-area electronics helpful. Excellent written/verbal communication skills and strong interpersonal and decision-making skills are important.

Please apply to our website: http://jobs.princeton.edu to Requisition #0700228.

# SENIOR RESEARCH SPEC I/II(LAB)

PRISM seeks applicants to join the Imaging and Analysis Center (www.princeton.edu/~iac). You will instruct and assist students and researchers in the operation of state-of-the-art instruments for imaging (optical, electron and scanning probe microscopes), and analysis (XRD, EDX, WDX); support the center's daily operation, maintenance of microscopes, electronics, vacuum and chilling systems; provide expertise in SEM and TEM sample preparation for both hard and soft materials; as well as support the teaching programs and perform other tasks as required.

A Master's degree in physical science and engineering and /or 5+ years related work experience is required. Competent skills in sample preparation techniques, including ion milling, ultramicrotome, staining, coating and polishing samples required. Good knowledge of electron microprobe analysis is preferred. Excellent communication and interpersonal skills are important.

Please apply to our website: http://jobs.princeton.edu to Requisition #0700851.

Princeton University is an equal opportunity/ affirmative action employer.