


Positions Available



Indian Institute of Science
Bangalore, India



POSTDOCTORAL POSITION

The Indian Institute of Science seeks postdoctoral applicants to work in an interdisciplinary research programme between materials and mechanical engineering on nanotribology and high temperature coatings. Suitable candidates will have core expertise in one or more of the following fields: mechanical behaviour of materials, microscopy (TEM, AFM), mechanics modeling, or tribology. Facilities available include nanoindenters, SPMs, FIB, FEG-TEM, SEM, nanotribometers, and excellent computing resources.

Positions are available with immediate effect and carry a monthly remuneration of about Rs 25,000/-.

Applications with a CV and list of three referees may be sent to Professors:

S. K. Biswas at skbis@mecheng.iisc.ernet.in
V. Jayaram at qjayaram@materials.iisc.ernet.in

www.iisc.ernet.in



BIOTECH AND CHEMICAL IP ATTORNEYS
Sterne, Kessler, Goldstein & Fox P.L.L.C.

Sterne, Kessler, Goldstein & Fox P.L.L.C. has immediate opportunities for Chemical and Biotech patent attorneys. Successful candidates must possess a Bachelor's degree in Chemistry, Biology, or the related engineering fields. An advanced degree in the above listed fields is preferred.

We are looking for motivated candidates with excellent credentials and at least two years of experience. Experience in the Nanotech or Materials areas is a plus.

Position offers the chance for major responsibilities. Candidates who seek to break out of a team and have the opportunity for leadership are encouraged to apply. Position entails direct client contact and all phases of patent practice. This will include preparation, prosecution, licensing, client counseling, and litigation. Competitive salary commensurate with experience and excellent benefits package are offered.

Please use **Reference Number SKGFBMRS31708** when applying for this position. Visit our website at www.skgf.com or contact Tacie Steidel, Recruitment Coordinator, Sterne, Kessler, Goldstein & Fox P.L.L.C., by e-mail at legalcareers@skgf.com or 202-371-2600.

www.mrs.org



IN SEARCH OF EXCELLENCE!

Silicon and Light: from macro to nano – SiLi-nano Martin Luther University Halle-Wittenberg

We are establishing a leading centre for light conversion processes in silicon: Silicon and Light: from macro to nano – SiLi-nano. The topic of "Optoelectronic Reciprocity" will be covered by two research groups – "Silicon-to-Light" and "Light-to-Silicon" – in close collaboration with the Institute for Physics of the Martin Luther University Halle-Wittenberg, the Max Planck Institute for Microstructure Physics, the Fraunhofer Institute for Mechanics of Materials and the Fraunhofer Centre for Silicon Photovoltaics. SiLi-nano will be largely independent and organised as an independent interinstitutional scientific entity under the roof of the Martin Luther University Halle-Wittenberg.

Research Group Leader/Assistant Professor "Silicon-to-Light"

The group leader should be an outstanding expert in the field of silicon technology, in particular silicon photonics and non-linear optics. The scientific focus of the group is a broad range of optical solid state spectroscopy as well as the preparation of nanostructured silicon.

Candidates should have a PhD (preferably in Physics). Experience in leading a research group and in university teaching is desirable.

Research Group Leader/Assistant Professor "Light-to-Silicon"

The group leader is expected to be an outstanding expert in the field of phosphors and fluorescent glasses and glass ceramics. The scientific focus of the group is a broad range of solid state spectroscopy as well as the preparation of fluorescent glasses and glass ceramics. Experience in the field of photon management for solar cells is necessary.

Candidates should have a PhD (preferably in Physics) and experience in leading a research group and in university teaching.

After five years of funding from the German Federal Ministry of Education and Research and a positive evaluation, a tenure track position will be provided for the two group leaders (Associate Professorship at the Institute for Physics at the Martin Luther University Halle-Wittenberg or a leading position at the Fraunhofer Institute for Mechanics of Materials).

Please send your application by 5 September 2008 to:

Professor Heinrich Graener
Dekan der Fakultät für
Naturwissenschaften II
Martin-Luther-Universität
Friedemann-Bach-Platz 6
06108 Halle, Germany



and

Project Management Organisation Jülich
Berlin Office
Zimmerstrasse 26-27
10969 Berlin, Germany
E-mail: k.-d.husemann@fz-juelich.de

For further information please contact:
heinrich.graener@physik.uni-halle.de; <http://www.sili-nano.de>

For further details on the application requirements please see:
<http://www.unternehmen-region.de>

Positions Available



ccem

Canadian Centre for Electron Microscopy

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE
Aberration Corrected TEM
Canadian Centre for Electron Microscopy**

McMaster University is establishing the Canadian Centre for Electron Microscopy, a national facility funded by the Canada Foundation for Innovation, the Province of Ontario, and McMaster University. The Centre currently operates a suite of scanning and transmission electron microscopes including a CM12 TEM, a JEOL 2010F, a VG HB601 (with fully upgraded electronics), and two aberration-corrected and monochromated FEI-Titan 80-300s. The centre is operated by the Brockhouse Institute for Materials Research and currently employs five technical staff, one facility manager, and two research associates. The Centre is seeking outstanding candidates to fill two positions in electron microscopy at the postdoctoral fellowship (PDF) level and/or research associate (RA) level depending on qualification and experience. Application deadline is **July 31, 2008**, but submissions will be considered until the positions are filled.

Position Summary

Postdoctoral Fellow (PDF)/Research Associate—Electron Microscopy: The role of the PDF/RA within the Canadian Centre for Electron Microscopy (CCEM) is to conduct research with advanced electron microscopy in order to support users of the facility using TEM/STEM/EELS-based techniques. Salary is \$Can 40,000-55,000 depending on level (PDF/RA and experience). The positions are initially for two years with possibility of extensions.

Summary Position Requirements

1. A PhD degree or equivalent in materials science/engineering, chemistry, or physics
2. Advanced understanding and skills in the acquisition and interpretation of electron microscopy data in the physical sciences
3. High quality research publications in international peer-reviewed journals in a relevant research field
4. Demonstrated interest in research collaborations
5. Expertise in at least one specialist area of TEM (CBED, HREM, EELS, HAADF, etc.)

For questions or submissions of your application (a CV, a list of publications, the names of three referees, and letter of motivation), contact:

Ms. Anne Reynolds, Brockhouse Institute for Materials Research
McMaster University, 1280 Main Street W., Hamilton, Ontario, L8S 4M1, Canada
areynol@mcmaster.ca

**POSTDOCTORAL POSITION
Materials for Electrochemical
Energy Storage
Carnegie Mellon University**

An industry-sponsored grant has been issued to Carnegie Mellon University to develop novel low cost energy storage solutions. Applications are invited from individuals holding a PhD degree in Materials Science, Chemical Engineering, or a related field, with a background in synthesizing and studying electrochemically functional materials.

Qualified candidates should e-mail a letter of application, their resume with publication list, and contact information for three individuals who can provide recommendations, to Prof. Jay Whitacre, at whitacre@andrew.cmu.edu.

Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

**RESEARCH SCIENTIST
University of Texas at Dallas**

Postdoctoral research scientist with PhD degree in Materials Science or related field sought to develop future semiconductor technologies. Extensive knowledge of thin films and/or semiconductor processing (ALD and PVD) required. Application deadline is **July 15, 2008**, but submissions considered until position filled. Send resume, publication list, and names of three references to Prof. Jiyoung Kim, University of Texas at Dallas, 800 W. Campbell Road, RL 10, Richardson, TX 75080; e-mail:jiyoung.kim@utdallas.edu.

UTD is an AA/EEO employer.

MRS Bulletin Upcoming Themes

August 2008

Bio-Inspired Materials for Self-Cleaning and Self-Healing

Guest Editors: Nancy R. Sottos (University of Illinois at Urbana-Champaign) and Jeffrey P. Youngblood (Purdue University)

September 2008

Nanostructured Materials in Information Storage

Guest Editors: Zvonimir Z. Bandić (Hitachi San Jose Research Center, Hitachi GST), Dmitri Litvinov (University of Houston), and Michael Rooks (IBM Yorktown Research)

October 2008

Negative Index Materials

Guest Editors: Wounghang Park (University of Colorado) and Jinsang Kim (University of Michigan)

For more information on these and other upcoming theme topics, visit www.mrs.org/bulletin.

Positions Available

UNIVERSITY OF MINNESOTA


**3M Harry Heltzer Multidisciplinary Chair
in Science and Technology**

The Graduate School and the Institute of Technology at the University of Minnesota—Twin Cities invites applications and nominations for the position of 3M Harry Heltzer Multidisciplinary Chair in Science and Technology. This is a tenured endowed position at the rank of associate or full professor (dependent upon qualifications/experience) in the area of physical and biological structures characterization utilizing microscopy and imaging. Candidates must have a distinguished academic and research record in this area, with several years of successful research and teaching experience. A Ph.D. degree and dedication to teaching, graduate student advising, and regular and sustained interaction with industry are required. Candidates are sought whose research agenda will contribute to building cross-disciplinary and cross-college collaboration in one or more areas of strategic importance university-wide, including within the Institute of Technology and with other units at the University of Minnesota. This endowed chair is intended to foster industry-university research interaction and collaboration while advancing scientific and technological expertise in new frontiers of knowledge relevant to the Institute of Technology and 3M. Candidates with a background in any relevant areas of science or engineering are encouraged to apply. Department affiliation will depend on the candidate's area of expertise, with the possibility of a joint appointment with one or more units in the University.

Applications should be submitted online at: <https://employment.umn.edu>, under Req. # 154636, and include a cover letter, curriculum vitae (including list of publications), research description/plan, statement of teaching interest, and contact information for three references. Review of applications will begin June 1, 2008, and continue until the position is filled. For further information, contact Douglas Ernie at ernie@umn.edu.

The University of Minnesota is an equal opportunity educator and employer.


**DEVELOPMENT SCIENTIST/ENGINEER
Chemat Technology Inc.**

Chemat Technology Inc. (www.chemat.com), a world known "Total Sol-Gel Solution" provider, has an immediate opening for a development scientist/engineer in the field of polymer science and engineering.

Job Responsibilities:

The primary job responsibility of this position is to work with other team members to develop new products for optical and biomaterials. Additional responsibility is to work on the contract research & development.

Requirements:

- Working experience and background in polymer coatings and solution formulation
- Good communication skills, especially in writing and presentation
- A PhD or MS degree in Materials Science and Engineering or Chemistry
- Participate in multidisciplinary, cross-functional teams toward specific project goals with good interpersonal skills and project execution
- Demonstrate technical leadership qualities and ability to self guide and occasionally supervise one to two technician-level employees; manage internal and external research and development projects

Applicants should send a complete resume and references by mail or e-mail to:

Chemat Technology Inc.

9036 Winnetka Avenue, Northridge, CA 91324

Attention:

Dr. Y. Huang, Director of R&D, yhuang@chemat.com; or
Ms. Jenny Sajoto, Director of Administration, jsajoto@chemat.com

Materials Scientist

ExxonMobil Research and Engineering Company has an immediate opening for a Materials Scientist in the Corporate Strategic Research Laboratory located in Clinton, NJ.

The successful candidate should have a PhD in Materials Science with specialization in physical metallurgy, mechanical behavior, high temperature materials and/or advanced microstructural characterization. The candidate should be capable of effectively working with affiliate ExxonMobil research laboratories to generate new research concepts for future technologies for the oil and gas and related industries. Candidate responsibilities include the design and execution of research programs, providing technical leadership and participating in other appropriate research activities in the laboratory. Prior post-doctoral and/or industry experience is a plus.

ExxonMobil offers an excellent working environment and a competitive compensation and benefits package. Please submit your cover letter and resume to our website at www.exxonmobil.com/apply. Please apply to Materials Scientist and reference **MTSRA-5696BR** in both letter and resume.

ExxonMobil is an Equal Opportunity Employer

Positions Available



**NANYANG
TECHNOLOGICAL
UNIVERSITY**

Nanyang Assistant Professorships

<http://www.ntu.edu.sg/publicportal/nanyangprof.htm>

Singapore's science and technology university, the Nanyang Technological University, invites outstanding young researchers and exceptional scholars in their fields of science, engineering, social sciences, arts and humanities, or business, to apply for appointments as **Nanyang Assistant Professors**. Up to ten appointments will be made.

Successful candidates will receive start-up research grants of up to **S\$1 million** and an attractive remuneration package with a competitive salary year and other benefits including assistance with accommodation. They will hold tenure-track appointments and play lead roles in the university's new wave of multi-disciplinary, integrative research. They are expected to be within 10 years of gaining their PhD degree and ready for independent leadership of their own research groups. Outstanding applicants in science and engineering are also encouraged to apply for the prestigious Singapore National Research Foundation Fellowships in Science and Technology (closing date of 15 September 2008; see <http://www.nrf.gov.sg>) indicating that the Fellowship will be held at the Nanyang Technological University.

Singapore has in place an exciting, dynamic, and well-funded research environment to nurture and attract top R&D talent and the Government has set aside S\$13.5 billion over 5 years to develop international R&D. In tandem, Nanyang Technological University is also making unprecedented research investments, emphasizing cutting-edge research and revolutionary technological innovations across multiple disciplines. It has already attracted world-leading researchers to its ranks.

This is a unique opportunity to join one of the fastest-growing research universities and participate in the rapid rise of Asia, in an English-speaking environment, at the interface between East and West.

To apply, please download the application form available at <http://www.ntu.edu.sg/publicportal/nanyangprof.htm> or send an email to nanyangprof-appform@ntu.edu.sg and submit to:

The Provost (NAP Application)
Nanyang Technological University
Administration Building, Level 5
50 Nanyang Avenue, Singapore 639798
Fax: (65) 6791-9340
E-mail: NanyangProfessorship@ntu.edu.sg

Closing Date: 30 September 2008

www.ntu.edu.sg

TECHNICAL RESEARCH STAFF POSITION Center for Nanostructured Materials University of Texas at Arlington

The Center for Nanostructured Materials (CNM) at the University of Texas at Arlington (UTA) invites applications for a Technical Research Staff position. CNM is a multidisciplinary research and teaching facility in the College of Science. It houses numerous nanomaterials characterization systems, including two X-ray diffraction systems (thin-film and single-crystal), AFM/STM, microprobe X-ray Photoelectron Spectroscopy, Raman Spectroscopy, EPR, MPMS, PPMS, etc. With an enrollment of about 25,000 students, UTA is an educational leader in the heart of the Dallas-Fort Worth Metroplex.

We seek an individual with an advanced degree in Materials Science, Condensed Matter Physics, or Chemistry and experience with the science and characterization of nanomaterials. Candidates with Masters Degrees will be considered, however, preference will be given to PhDs and those experienced with crystal structure determination. The successful candidate will operate, maintain, and manage CNM's above-described characterization facilities, as well as assist faculty in the education and training of the students. The selected individual will work under the supervision of and report directly to the CNM Director. Interested applicants should submit an online application at www.uta.edu/jobs. Review of applications will begin immediately and continue until a successful candidate is identified. This is a security sensitive position and a criminal background check will be conducted on finalists. Please call 817-272-3461 with questions. For technical questions, please contact Professor Suresh C. Sharma, Director, Center for Nanostructured Materials at sharma@uta.edu or 817-272-2470.

*The University of Texas at Arlington is
an Equal Employment Opportunity and
Affirmative Action Employer.*

POSTDOCTORAL POSITION Mechanical Behavior of Materials Arizona State University

Applications for a postdoctoral position are invited from individuals holding a PhD degree in materials engineering or a related field, with a background in mechanical behavior of materials. Qualified candidates should e-mail a letter of application, CV with publication list, and contact information for three references, to Prof. Nik Chawla at nchawla@asu.edu. The application deadline is **August 1, 2008**; submissions will be considered until the position is filled.

ASU is an EO/AA Employer.

Positions Available

PROGRAM DIRECTOR POSITIONS

Division of Materials Research
National Science Foundation

NSF's Division of Materials Research (DMR), Arlington, Virginia, is seeking qualified candidates for **Program Director** positions in the Metals Research Program and the Materials Research Science and Engineering Center (MRSEC) Program.

Appointment to these positions may be on a one- or two-year Visiting Scientist appointment or a Federal Temporary appointment, with a salary range of \$98,033 to \$152,775. Alternatively, these positions may be filled under the terms of the Intergovernmental Personnel Act.

PROGRAM DIRECTOR—Metals Research Program

Within the Division, the Metals Research Program supports research to increase understanding and predictive capabilities for relating synthesis, processing, alloy chemistry, and microstructure of metals to their physical and structural properties and performance in various applications and environments. Metals research encompasses the broad areas of physical and mechanical metallurgy, including: low dimensional systems such as atomic clusters, atomic chains, nanostructures, thin films, and multilayers; metallic glasses; multiferroics; magnetic materials; high temperature materials; lightweight alloys; environmentally benign alloys; energy storage materials; advanced high strength alloys; single crystals; and metal alloys with unusual geometry—foams, metamaterials, etc. Topics supported include: surface and interface modification, structure, composition, and properties; corrosion, oxidation, and electrodeposition; defects; phase transformations and equilibria; diffusion and solidification; deformation and fracture; and welding science. Further information about the Metals Research program can be found on the DMR website at <http://www.nsf.gov/materials>. Applicants for the Metals Research Program must have a PhD degree or equivalent experience in the physical sciences, engineering, or a closely related field. In addition, six or more years of successful research, research administration, and/or managerial experience pertinent to the program are required.

PROGRAM DIRECTOR—MRSEC Program

Within the Division, the MRSEC program supports materials research of scope and complexity that would not be feasible under traditional funding of individual research projects. The MRSECs constitute a spectrum of coordinated centers of differing scientific breadth and administrative complexity that may address any area (or several areas) of materials research. Further information about the program can be found at http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5295&org=DMR&from=home and at the MRSEC website at <http://www.mrsec.org/>. Applicants for the MRSEC Program must possess a PhD degree or equivalent experience in materials science and engineering, condensed matter and materials physics, solid state and materials chemistry, biomaterials, or a closely related field of science or engineering. In addition, six or more years of successful research, research administration, and/or managerial experience pertinent to the program are required.

Applicants must be familiar with a broad spectrum of the materials research community and have a demonstrated interest in interdisciplinary materials research. The appointees are expected to work with the materials community to broaden the diversity of participants in NSF programs, and to integrate research and education in the materials field. Applicants with accomplishments in the integration of research and education and with multidisciplinary experience and interests are desired.

To apply for a Visiting Scientist, IPA, or Federal Temporary appointment see announcement E20080114-Rotator for the Metals Research Program and E20080111-Rotator for the MRSEC Program. The position requirements and application procedures are located on the NSF Home Page at www.nsf.gov/about/career_opps/. Hearing-impaired individuals should call TDD at 703-292-8044. Applications must be received by **August 1, 2008** for the Metals Research Program and **August 29, 2008** for the MRSEC Program.

NSF is an Equal Opportunity Employer

NIST

National Institute of
Standards and Technology
U.S. Department of CommerceSCIENTISTS AND ENGINEERS
Nanoscale Measurements for
Energy-Related Processes,
Materials, and Devices
National Institute of Standards
and Technology

The Center for Nanoscale Science and Technology, a new center at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD, is seeking exceptional scientists and engineers with a strong record of creativity and achievement in the areas of energy conversion, storage, and transport. This new research program will interface with and build upon extensive NIST programs for electrical, magnetic, chemical, physical, optical, and biological nanoscale measurements and standards. Applicants should have a strong interest in developing new instrumentation and measurement methods for nanoscale characterization of light-matter interaction, charge and energy transfer processes, catalytic activity, or interfacial structure in energy-related devices. Applicants must possess the leadership abilities required to build a thriving research program, have a successful record of interacting with multiple disciplines, and be able to effectively communicate their results to a wide variety of audiences. For additional information about the Center for Nanoscale Science and Technology, please visit <http://www.cnst.nist.gov/>.

Positions may be filled at any appropriate level (NIST pay band III-V, salary \$58,206 to \$149,000). Federal employees also receive a generous benefits package, <http://www.nist.gov/hrmd/benefits/summarychart.htm>.

A PhD degree in physical science, chemistry, or engineering is preferred. Several years of experience in one or more of the research areas described are required. Please send a CV along with a statement of research interests to CNSTjobs@nist.gov. Applications will be accepted on a continuing basis. US citizenship is required.

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Place Your Ad Today!

Contact Mary E. Kaufold at
724-779-8312 or kaufold@mrs.org