

ENDOWED CHAIR AND DIRECTOR Center for Materials for Information Technology The University of Alabama

The University of Alabama is seeking candidates for the position of Endowed Chair and Director of the Center for Materials for Information Technology in Tuscaloosa, Alabama. The position will be available on January 1, 2009, and the appointment will be made as a faculty member in a department appropriate to the candidate's field of specialization.

The Center, currently a NSF Materials Research Science and Engineering Center, has a significant number of industrial sponsors and an interdisciplinary focus. Faculty members from six different academic departments and two colleges participate in materials research related to information storage and related areas. The Center also has available world-class fabrication, characterization, and computational facilities commensurate with its broad and interdisciplinary research. The Center's research has focused on magnetic information storage, but leadership of the director in the exploration of new areas is expected. Strong communication skills and a willingness to work in a team environment are critical.

Responsibilities include organization and evolution of the center, establishment of foci for collaborative research, assessment of future needs in information storage and other areas, initiation of research projects appropriate to his/her own expertise, management of the Center's staff, and interaction with industrial, federal, and state agencies to represent the capabilities of the researchers and the facilities of the Center. Candidates should have an earned doctoral degree and a strong record of scholarship and leadership in an area of science or engineering. Additional information about the MINT Center and the University of Alabama can be found at http://mint.ua.edu/.

Applicants interested in this position are requested to apply online at http:// facultyjobs.ua.edu/applicants/ Central?quickFind=51910. Consideration of applicants will begin immediately, and will continue until the position is filled.

The University of Alabama is an affirmative action/equal opportunity educator and employer.

Tier I Canada Research Chair In Composite Materials

Located in the thriving, multicultural city of Winnipeg, the University of Manitoba offers students and faculty a vibrant learning community, exceptional facilities and the chance to explore ideas, challenge assumptions and turn theory into reality. Our researchers are among the best in the world, finding new ways to protect the environment, improve human health, advance technology and strengthen communities in Canada and beyond. With more than 30,000 students, faculty, and staff, and over 90 degree programs, the University of Manitoba plays a key role in the social, cultural, and economic well-being of our community and our world.



The University of Manitoba is seeking applications or nominations for a Tier I Canada Research Chair (CRC). These chairs were established by the Government of Canada to foster world class research excellence in Canadian Universities (www.chairs.gc.ca). The Chair will be expected to pursue a vigorous research program in the field of composite materials based in the Department of Mechanical Engineering in the Faculty of Engineering. The program should enhance the University's existing research strength in the composites area, and bring complementary strengths in one or more of the following areas: composite part design and analysis; composite materials and structures modeling including damage and failure; fabrication techniques; impact behavior and damage assessment; testing and inspection of composites; composite damage types and their significance to structural integrity; composite bonding repair methods; and biodegradable resins, bioplastics, and biocomposites. The successful applicant must hold an earned doctoral degree in the field of Composite Materials. In addition, the individual should have an outstanding publication and funding record that demonstrates a successful and active research program. The appointment will be tenured with limited teaching responsibilities. This position is available April 1, 2009 or soon thereafter.

The position represents an exciting opportunity for experienced individuals who are recognized internationally as leaders in their field and who are currently in the rank of Professor or Associate Professor (within a year or two of promotion to Professor). Material Science and Engineering is a major thrust in the University's strategic research plan and the University has allocated a total of seven NSERC CRCs to this general area of research excellence: four Tier I CRCs and to three Tier II CRCs (http://umanitoba.ca/admin/vp_research/media/strategicplan_ current.pdf). With a reduced teaching and administrative load, the Chair will be expected to take a leadership role in promoting the proposed Composite Research Centre and fostering strong partnerships with Industry including the Composites Innovation Centre (www.compositesinnovation.ca).

The Department of Mechanical and Manufacturing Engineering is responsible for two accredited undergraduate programs (Mechanical Engineering and Manufacturing Engineering) and an option in Aerospace Engineering. The Department has a very active graduate teaching and research program and is the home of a Tier I CRC in Aerospace Materials, a Tier II CRC in Applied Mechanical Design and an NSERC/Manitoba Hydro Industrial Associate Chair in Alternative Energy. The Department presently has 25 academic staff, 14 support staff, several post-doctoral fellows, research associates and visiting scholars, as well as approximately 110 graduate students.

Winnipeg is a mature city of some 700,000 people with rich recreational and cultural opportunities. It combines the amenities of urban life with easy access to the countryside and to northern lakes and forests. Housing prices are low by North American standards. Additional information can be found at: http://www.city.winnipeg.mb.ca/ and http://www.gov.mb.ca/.

The review of applications will begin in January 2009 and will continue until the position is filled. All Chairs are subject to review and final approval by the CRC Secretariat.

Applications should quote Search #08735 and include a brief description of a research plan, curriculum vitae and the contact information for at least three referees. Please submit all materials to:

Professor D. Kuhn, Head, Department of Mechanical and Manufacturing Engineering, University of Manitoba, Winnipeg, Manitoba, Canada R3T 5V6, dkuhn@cc.umanitoba.ca or 204.474.9803

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disabilities. All qualified candidates are encourages to apply, women are particularly encouraged to apply; Canadian and permanent residents will be given priority.

Application materials, including letters of reference, will be handled in accordance with the *Freedom of Information* and *Privacy of Protection Act* (Manitoba).





UNIVERSITY of Manitoba

CLASSIFIED

Positions Available



MATERIALS ENGINEER

U.S. Army Research Office

Applications are being solicited for a Materials Engineer, DB-0806-03 (equivalent to the GS-12/13 grade level), \$67,416 to \$104,223 per annum, or a Materials Engineer, DB-0806-04 (equivalent to the GS-14/15 grade level), \$94,733 to \$144,868 per annum. Salary within the ranges above includes a locality adjustment and depends upon individual qualifications and salary history. The position is located at the U.S. Army Research Office in Research Triangle Park, N.C.

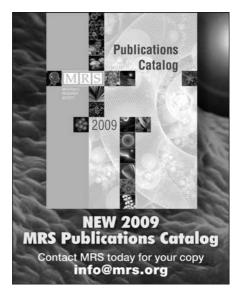
The incumbent creates, directs, and manages a leading extramural basic research program (experimental and theoretical) in materials science, focusing on the physical properties of materials and fostering scientific achievements relevant to future Army systems. Expertise is required in the areas of electronic, optical, magnetic, and actuator materials. Duties include:

- Initiating new research projects in response to Army needs
- Stimulating proposals to respond to those needs
- Analyzing and evaluating proposals
- Communicating with grantees and contractors
- Reviewing and analyzing research reports, and insuring their effective distribution
- Stimulating technology transfer to both Army and civilian users
- Evaluating grantee and contractor performance
- Disseminating program policies and research results
- Maintaining awareness of Army in-house R&D programs
- Developing and presenting briefings and research summaries that highlight projects, objectives, progress, accomplishments, and emerging opportunity areas within materials science to Army leadership and the scientific community
- Initiating and carrying out workshops, conferences, and symposia addressing emerging materials research initiatives
- Serving as the principal Army advocate and representative for basic research activities and needs in physical properties of materials.

In order to maintain scientific acumen, the incumbent may perform research at a local university for up to one day per week. Travel up to 25% of the time may be required. Outstanding verbal and written skills are required. Applicants must show successful completion of a full 4-year course of study in an accredited college or university leading to a bachelor's or higher degree in materials science, or a combination of education and experience equal to a GS-12/13 level position in the Federal government. An advanced degree at the PhD level preferred. Experience must have been in or related to the work of the position and have equipped the applicant with the knowledge, skills, and abilities to successfully perform the duties of the position.

Applicants must be U.S. citizens, be able to obtain a secret clearance, and comply with provisions of the Ethics in Government Act. Interested individuals must apply electronically following instructions at **www.usajobs.opm.gov** or at **www.cpol.army.mi**. Vacancy Announcement NEAC08198679 and NEAC08198679 D for the DB03, and NEAC08199486 and NEAC08199486D for the DB04.

Opening date is January 20, 2009 and closing date will be February 19, 2009. If you have questions, please contact Mrs. Paula Valdez at 301-394-2109.



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Max-Planck-Institut für Eisenforschung in Düsseldorf (Germany) www.mpie.de



The $\mbox{Max-Planck-Institut für Eisenforschung (MPIE)}$ invites applications for the position of a

Group Leader (Electrochemistry)

in the department "Interface Chemistry and Surface Engineering"

The scope of the department is the development of novel experimental techniques for the study of electrochemical processes at interfaces within wide margins. The successful candidate is expected to have an excellent background in the area of electrochemistry, enabling her or him to build a strong and independent research programm complementing the ongoing activities within the department. In addition to state-of-the-art facilities for fundamental research, the MPIE provides a close connection to industrial research labs.

The applicant must have a doctoral degree in physics, chemistry or a related field. The payment will depend on the previous experience of the candidate, up to the status of associate professor (W2).

The Max Planck Society is an equal opportunity employer. Women are encouraged to apply. Applications are accepted until the position is filled. Candidates are invited to send their applications including a short (~1 page) outline of planned research to:

Max-Planck-Institut für Eisenforschung GmbH Prof. Dr. Martin Stratmann Max-Planck-Straße 1 • 40237 Düsseldorf • Germany or: ECapplication@mpie.de

DIVISION DIRECTOR

Research Center for Applied Sciences Academia Sinica

Applications are invited for the position of Director of Thematic Center for Mechanics and Engineering Science, a division of the Research Center for Applied Sciences (RCAS), Academia Sinica, Taiwan. The qualified individual must have a PhD degree in areas related to Mechanics and Engineering Science and sufficient research experience. Prior administrative experience (at the level of a project leader or department chair) is desired but not required. RCAS (http://www.rcas.sinica.edu.tw) is an interdisciplinary research center containing four groups:

- 1. Nano-biotechnology;
- 2. Mechanics and engineering science;
- 3. Optoelectronics and advanced materials;
- 4. Advanced computation and modeling.

The current subjects of interest in the Mechanics group include biomechanics, microfluids, nanomechanics, soft matters, and debris flow.

We are seeking an individual with established research achievements and good managerial skills to lead an interdisciplinary research team. Level of appointment and salary depend on qualification and experience. Exceptional candidate may be appointed as a distinguished research fellow (equivalent to a chair professor). Interested candidates should arrange to have three letters of references and CV sent via e-mail to **joycelin@gate.sinica.edu.tw** before **March 31, 2009**.



UNIVERSITÄT DES SAARLANDES



Saarland University is a campus university with an international orientation and a distinct research profile. The INM-Leibniz Institute for New Materials in Saarbruecken, with approximately 180 employees, engages in fundamental and applied materials research from molecules to pilot production (www.inm-gmbh.de).

Saarland University and INM are seeking an outstanding scientist for the position of **Professor (W3 salary level) for Chemical Materials Science** at the Faculty of Chemistry, Pharmacy, Bio- and Materials Sciences. This position will be combined, in a joint appointment process, with the post of a **Scientific Director** at INM.

Subject to personal experience, it is expected that the candidate will take an executive role at INM. The anticipated starting date is April 1, 2010.

The successful candidate must be highly qualified in the field of chemical materials science. Preferred research areas include, but are not limited to, modern hybrid/composite materials, inorganicorganic polymer materials, smart surfaces and coatings, biomimetic and bioactive material concepts, as well as novel processes in chemical nanotechnology. For a successful application, experience in industrial collaborative work and in technology transfer will be expected. The individual will also be involved in the teaching of chemistry and materials science at Saarland University.

Formal requirements include a PhD degree in a relevant field, an outstanding record in research, as well as additional accomplishments like habilitation or equivalent scientific achievements. Experience in management of scientific research is desirable.

In accordance with the Frauenförderplan (government action plan on women and work), the Saarland University aims to increase the percentage of women in this field of work. Applications from female scholars are therefore particularly encouraged. Given equal qualifications, handicapped applicants will be considered on a preferential basis.

Applications accompanied by the usual documents, a statement of research interests and plans, as well as private address (telephone number and email address) should be sent no later than **February 28**, **2009** to:

Prof. Dr. Eduard Arzt, Chairman and Scientific Director **INM–Leibniz Institute for New Materials** Campus D2 2 66123 Saarbrücken Germany

and to

The Dean of Faculty 8 (Natural Sciences and Technology III) Prof. Dr. Uli Müller **Saarland University** Campus C4 3 66123 Saarbrücken Germany

www.inm-gmbh.de



JUNIOR FACULTY POSITIONS

School of Engineering Massachusetts Institute of Technology

The MIT School of Engineering seeks candidates for four tenuretrack faculty positions to begin July 2009 or thereafter, one each in the areas of:

- Computational Engineering
- Energy
- Green Technologies
- Transportation

These four areas have been identified as vital to the School of Engineering (SoE) and these searches are being coordinated at the SoE level with search committee members drawn from many departments/divisions.

Each appointment would be at the assistant or untenured associate professor level in one or more of the departments or divisions in the School. In exceptional circumstances more senior candidates will be considered. Faculty duties will include teaching at the graduate and undergraduate levels, research, and supervision of student research. Candidates should hold an earned PhD degree in a relevant field by the beginning of the appointment period. The candidate should have demonstrated excellence in original research and should have an interest in research topics that cross traditional disciplinary boundaries.

Interested candidates should submit application materials electronically. For more information see http://school-of-engineeringfaculty-search.mit.edu. Each application should include: a curriculum vitae, the names and addresses of three or more references, a statement of teaching interests, and a statement of research plans and interests in one of the four research areas.

The application should also include a cover letter indicating which of the four research areas you will focus on, which department or division would be the best match for your teaching interests, and specifying two or more departments and/or divisions in the MIT School of Engineering that would be interested in your research.

We request that each candidate arrange for reference letters to be uploaded electronically. Questions should be addressed to search-master@school-of-engineering-faculty-search.mit.edu. Submission of applications by January 30, 2009 is preferred, but all applications received by March 15 will be considered.

We especially encourage minorities and women to apply, because of MIT's strong commitment to diversity in engineering education, research and practice



PROGRAM DIRECTOR

Condensed Matter Physics (CMP) Program **Division of Materials Research** National Science Foundation

The National Science Foundation's Division of Materials Research (DMR) is seeking gualified applicants for the position of Program Director for the Condensed Matter Physics (CMP) Program. The position will be filled on a permanent basis or non-permanent basis for one to three years as a visiting scientist, as a temporary federal appointment, or under the provisions of the Inter-governmental Personnel Act (IPA).

Within the Division of Materials Research (DMR), the Condensed Matter Physics (CMP) Program supports fundamental, experimental, and combined experiment and theory projects with the goal of understanding the physics behind phenomena exhibited by condensed matter systems consisting of solid, liquid, or amorphous materials. Further information about the CMP program can be found on the DMR website at http://www.nsf.gov/materials. Individuals with both experimental and theoretical condensed matter and materials physics experience are desirable, but exceptional candidates with experience in either area will be considered. Appointees are expected to work with the condensed matter and materials physics community to broaden the diversity of participants in NSF programs, and to integrate research and education in the field. Applicants must have a PhD degree or equivalent experience in condensed matter, materials physics, 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.

Applicants for temporary assignment should refer to vacancy number E20090026-Rotator and applicants for permanent assignment should follow the application instructions for vacancy number E20090025 found at http://www.nsf.gov/jobs. Applications must be received by March 31, 2009.

The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. Those applicants, who need a reasonable accommodation for any part of the application and hiring process, should notify the point of contact listed on this Vacancy Announcement.

> NSF is an equal opportunity employer committed to employing a highly qualified staff that reflects the diversity of our nation.



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Journal of Materials Research	
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Materials Research Society www.mrs.org/jmr	Members—Non-US*\$250.00 Institutional—Non-US*\$1130.00 *non-US rates include airfreight delivery

NDSU

FACULTY POSITION Experimental Polymer Physics North Dakota State University

North Dakota State University invites applications for a tenure-track faculty position in experimental polymer physics. Appointment is expected to be at the Assistant Professor level, although outstanding candidates will be considered for a more senior appointment. This is a joint appointment in the Departments of Physics and Coatings and Polymeric Materials. Targeted research areas include the morphology and characterization of multiphase polymeric materials, biopolymers, and nano-composites, both in equilibrium and under non-equilibrium conditions. Research interests of current faculty range from theoretical and computational soft matter/biophysics to pigment-polymer interactions, film formation processes, the synthesis of high-performance polymers, and cross-linking chemistry and kinetics. Related programs at NDSU include the interdisciplinary graduate program in Materials and Nanotechnology, the Center for Nanoscale Science and Engineering, and the new Materials initiative at the Center for High Performance Computing. A typical teaching load is two courses per year. For more information about the Departments, see http://physics.ndsu.edu and http://cpm.ndsu.nodak.edu.

Minimum qualifications include a PhD degree in Physics or a related field, potential to attract external funding, ability to teach undergraduate and graduate courses, and effective communication skills. Postdoctoral experience is preferred. Applicants should submit a cover letter, vita, teaching philosophy, research plan, and contact information for three references through NDSU's online application system at jobs.ndsu.edu/applicants/ Central?quickFind=50733.

Screening begins **February 9, 2009** and will continue until the position is filled. For questions regarding this position, please contact Stuart Croll, Search Chair and Head of Coatings & Polymeric Materials Department, at 701-231-8439 or Stuart.Croll@ndsu.edu or Daniel Kroll, Head of Physics Department, at 701-231-8968 or Daniel.Kroll@ndsu.edu .

NDSU is an equal opportunity employer. Women and traditionally underrepresented minorities are encouraged to apply.



TEACHING FELLOWS/ASSISTANT PROFESSORS/ ASSOCIATE PROFESSORS/PROFESSORS SCHOOL OF MATERIALS SCIENCE & ENGINEERING

1. VACANCIES IN FACULTY APPOINTMENTS

The **School of Materials Science and Engineering** (http://www.mse.ntu.edu.sg/) in NTU is the largest materials science and engineering institution in Singapore, comprising a strong team of 130 staff members and more than 1200 students. The School, with its own 6-story building, has extensive facilities within the university grounds.

The School has major funded research programs and is actively seeking full-time tenure-track faculty members in the following areas:

A. Structural Ceramics

We are seeking outstanding candidates for a faculty appointment in the area of structural ceramics for functional applications. Relevant experience in sintering behaviours, porous structures, composites and high-temperature performance would be preferred. The successful candidate must hold a PhD degree in materials science and engineering, or a related science/engineering discipline. The candidate is expected to teach both undergraduate and graduate courses, supervise graduate students, produce high-quality research publications, and attract external funding to build a strong sponsored research program.

B. Polymer Composites

We are recruiting highly qualified candidates to work in the area of polymer composites. Individuals with a strong background in processing and mechanics of polymer composite materials would be preferred. The candidate must hold a PhD degree in materials science and engineering or mechanical engineering. The successful candidate is expected to be a proficient educator in the school's graduate and undergraduate programs, initiate applied research and collaborate extensively with local/overseas research institutions, and lead his/her own dynamic research team.

2. EMOLUMENTS AND GENERAL TERMS & CONDITIONS OF SERVICE

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered. Information on emoluments and general terms and conditions of service is available in the section on Terms and Conditions of Service for Academic Appointments (http://www.ntu.edu.sg/ ohr/Career/terms/Pages/FacultyPositions.aspx).

3. APPLICATION PROCEDURE

Applications must be made on prescribed forms (download forms at http://www.ntu.edu.sg/ohr/Career/ SubmitApplications/Pages/Faculty.aspx). The post applied for should be clearly stated. Completed application forms may be submitted by normal mail, fax, or email to:

> Chairman, Search Committee School of Materials Science and Engineering **NANYANG TECHNOLOGICAL UNIVERSITY** 50 Nanyang Avenue Singapore 639798 Fax: (65) 6790-0921 E-mail: d-mse@ntu.edu.sg



ENERGY FACULTY POSITION Department of Mechanical and Aerospace Engineering University of California, San Diego

The Department of Mechanical and Aerospace Engineering at the University of California, San Diego, invites applications for tenure-track and tenured faculty positions from candidates with interests in innovative research related to emerging energy technologies. The Department is particularly interested in candidates with basic engineering science research interests motivated by applications in energy storage, renewable energy conversion, carbon capture and sequestration, fuel cells, and advanced fission systems. UCSD is committed to using the campus as a laboratory for emerging energy technologies, and candidates have the opportunity to incorporate recent campus investments in renewable energy, fuel cell, DC-to-DC grid, advanced energy storage, and smart grid capabilities in the definition and execution of their research efforts. Candidates would also be encouraged to collaborate and/or complement existing research efforts within the UCSD Center for Energy Research. Successful candidates will be committed to excellence in undergraduate and graduate teaching including the subjects in the energy related science and technology, and will be expected to develop a leading research program in their research area.

QUALIFICATIONS: PhD or equivalent degree.

RANK AND SALARY: Level of appointment commensurate with qualifications; salary based on published UC pay scales.

Applications (CV, statement of research and teaching interests, and names of three references) should be submitted by e-mail to Brandy Carrasco at **bcarrasco@ucsd.edu**. Applicants are welcome to include in their cover letters a personal statement summarizing their contributions to diversity.

Deadline for submission is February 18, 2009.

Please visit http://maeweb.ucsd.edu/index.php for more information.

The University of California at San Diego is an Affirmative Action/Equal Opportunity Employer with a strong institutional commitment to excellence through diversity.

SUPERVISORY GROUP LEADER/SCIENTIST POSITIONS Forest Products Laboratory USDA Forest Service

The US Forest Service, Forest Products Laboratory, Madison, WI, is seeking applicants for two permanent, full-time research group leader/scientist (GL/S) positions (salary range: \$95,010 to \$145,290 per year). Each GL/S will lead a group of 10-12 researchers and conduct personal research. Applicants must have demonstrated success in leveraging programs through grants, effective leadership of research teams, and rigorous personal research. USA citizenship is required.

The GL/S for Engineered Composite Science Research needs a strong background in Materials Science, Engineering (Mechanical or Chemical), or Wood Science. The GL/S will direct and carry out materials research to develop innovative composites with improved properties, durability, and utility.

SEE: http://jobsearch.usajobs.gov/ ftva.asp?seeker=1&JobID=78289130

The GL/S for Performance Enhanced Biopolymers Research needs a strong background in Materials Science, Chemistry, or Chemical Engineering. The GL/S will direct and carry out basic and applied materials science research involving synthetic and natural polymers and other materials.

SEE: http://jobsearch.usajobs.gov/ ftva.asp?seeker=1&JobID=78289108

ASSISTANT RESEARCH SCIENTIST

Irradiation Assisted Stress Corrosion Cracking University of Michigan

An assistant research scientist position is available beginning in January 2009 in the area of stress corrosion cracking of irradiated materials in the Department of Nuclear Engineering and Radiological Sciences at the University of Michigan. The successful candidate will play a leading role in a long-term project aimed at understanding the mechanism of irradiation assisted stress corrosion cracking in neutron irradiated alloys using the facilities in the Irradiated Materials Laboratory at UM. A significant fraction of the project will involve crack growth determination using the DCPD technique and crack initiation using constant extension rate tensile experiments. Candidates should have a background in stress corrosion cracking, crack growth measurements, mechanical properties of materials, and radiation damage processes in metals.

Please send CV and the names of three references to:

Prof. Gary S. Was; Department of Nuclear Engineering and Radiological Sciences 1921 Cooley Building; University of Michigan; Ann Arbor, MI 48109-2104 Phone: 734-763-4675; Fax: 734-763-4540; E-mail: gsw@umich.edu



The University of Michigan is a non-discriminatory, affirmative action employer.