



UNIVERSITÄT DES SAARLANDES

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

Saarland University seeks a candidate for a

University Professorship (W3) for Materials Synthesis and Materials Development

in Faculty 8 (Chemistry, Pharmacy, Bio- and Materials Sciences) as a joint appointment combining the Professorship with employment as

Scientific Director at INM - Leibniz Institute for New Materials

In recent years, INM has completed a successful reorientation and is now engaged in research and development of new materials based on a chemical, physical and biological point of view. The appointee will mainly focus on synthesis, production and processing of chemical or biological/ medical materials at INM and must have extraordinary qualifications and skills in the field of materials research. Potential fields of activity are modern hybrid and composite materials, new functional ceramics and complex high performance alloys, in bulk or as thin films and coatings. Preferred areas of application are, for example, power engineering, biomedicine, traffic engineering and communication technology. A willingness to seek collaboration with other departments and faculties is desirable, e.g. to support the NanoBioMed focus of Saarland University. The appointee will be involved in the teaching of Chemistry and Materials Science at Saarland University. Collaboration across borders with partners from the SaarLorLux Greater Region is encouraged to support the "University of the Greater Region" (www.uni-gr.eu).

A university degree in a relevant field is required, along with evidence of qualifications supporting the ability to carry out outstanding academic work. The assessment of whether a candidate possesses such an ability will be based generally on the quality of the candidate's PhD, habilitation or equivalent scientific achievements. Extensive experience with technology transfer and of interacting with industry is required. Experience with management of scientific research is desirable.

Your application should include a curriculum vitae, a publications list (including citation data according to ISI standards), and details of fields of interest and activity, extramural funding and interactions with industry. A description (approximately 2 pages) of your research plans at INM should be included.

Please send your application to both of the following addresses (closing date September 23rd, 2011):

Prof. Dr. Eduard Arzt Scientific Director and Chairman, INM - Leibniz-Institut für Neue Materialien, Campus D2 2, 66123 Saarbrücken/Germany

The Dean of Faculty 8 (Natural Sciences and Technology III), Prof. Dr. Wilhelm F. Maier, Universität des Saarlandes, Campus C4 3, 66123 Saarbrücken/Germany

In accordance with its Frauenförderplan (a government action plan for women and work), Saarland University aims to increase the percentage of women in this field of employment. Female candidates are therefore strongly urged to apply for this position. Preference will be given to severely handicapped applicants with equivalent qualifications. Herman F. Coors Distinguished Professor and Endowed Chair of Ceramic Engineering

Colorado School of Mines

The George S. Ansell Department of Metallurgical and Materials Engineering at Colorado School of Mines seeks applications and nominations for the Herman F. Coors Distinguished Professor and Endowed Chair of Ceramic Engineering.

Qualifications:

PhD degree in Ceramic Engineering, Materials Science and Engineering, or a closely related field. The successful candidate will have a distinguished international record of scholarship and education in ceramic science and engineering. A strong commitment to both undergraduate and graduate education is required.

For a complete job announcement and instructions on how to apply, please visit our web site at http:// inside.mines.edu/HR-Academic-Faculty.

Mines is an EEO/AA employer.



The 6th International Conference of the Africa Materials Research Society

December 11–16, 2011 Elephant Hills Resort, Victoria Falls, Zimbabwe



For more details visit www.mrs.org/africa-2011





A CAREER WHERE INNOVATION **MEETS APPLICATION**

The Hong Kong Polytechnic University is the largest government-funded tertiary institution in Hong Kong in terms of student number. It offers programmes at Doctorate, Master's, Bachelor's degrees and Higher Diploma levels. It has a full-time academic staff strength of around 1,200. The total consolidated expenditure budget of the University is in excess of HK\$4 billion per year. Committed to academic excellence in a professional context, PolyU aspires to become a world-class university with an emphasis on the application value of its programmes and research. Its vision is to become a "preferred university" offering "preferred university" offering "preferred university" offering "preferred university". programmes" with a view to developing "preferred graduates"

The University is now inviting applications and nominations for the following post:

Head of Department of Applied Physics (Ref. 11072506)

The successful candidate will be appointed as Chair Professor/Professor, commensurate with his/her qualifications and experience, and hold a concurrent headship appointment. Post specification of the above position can be obtained from http://www.polyu.edu.hk/hro/deans&heads.htm.

Remuneration and Conditions of Service

Terms of appointment and remuneration package are negotiable and highly competitive.

Application

Applicants are invited to send detailed curriculum vitae with names and addresses of three referees to the Applicants are invited to send detailed curriculum vitae with names and addresses of three referees to me Human Resources Office, 13/F, Li Ka Shing Tower, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong [Fax: (852) 2764 3374; E-mail: <u>hrscap@polyu.edu.hk]</u>, quoting position applied for and reference number. Recruitment will continue until the position is filled. Initial consideration of applications will commence in October 2011. Candidature may be obtained by nomination. The University reserves the right not to fill the position or to make an appointment by invitation. General information about the University and the Department of Applied Physics is available on the University's World Wide Web Homepage <u>http://www.polyu.edu.hk and http://www.polyu.edu.hk/ap</u> respectively or from the Human Resources Office [Tel: (852) 2766 5306]. Details of the University's Personal Information Collection Statement for recontingent can be found at bitm. //www.polyu.edu.hk/rog/inbrins.htm Statement for recruitment can be found at http://www.polyu.edu.hk/hro/jobpics.htm.

To learn and to apply, for the benefit of mankind

CALIFORNIA INSTITUTE **OF TECHNOLOGY**

Lab Manager

Job Duties

- · Maintain operation of instruments and equipment in a research laboratory with 10-15 graduate students and several post-doctoral scholars.
- Operate and calibrate instruments and equipment; coordinate maintenance/repair of such items communicate with company engineers; organize and store operation manuals and service records. Maintain on-line reservation system for equipment use. Instruments include: X-ray diffractometer, thermal analyzer (gravimetric and calorimetric), thermomechanical analyzer, mass spectrometer, dilatometer, electrical frequency response analyzers, high temperature furnaces

Qualifications

Bachelor's degree in engineering or sciences plus two years experience in wet chemistry and/or physical labs. "Hand's on" laboratory skills with instrumentation. Excellent communication skills, both oral and written. Highly organized. Able to work with a diverse group of researchers. Facility with common software.

To be considered for this position please visit our web site and apply on line at the following link: http://apptrkr.com/195442 EOE



Faculty Position in Micronanotechnology at the Ecole Polytechnique Fédérale de Lausanne (EPFL)

The Institute of Microengineering (IMT) within the School of Engineering at EPFL is seeking for its Neuchatel site, a tenured associate or full professor in the area of micronanotechnology. This new position is aimed at reinforcing the leading position of the Swiss watchmaking industry by giving it the means to further improve its competitiveness and to continue innovation.

The mission of the chair and its objectives are:

- · to develop novel fabrication technologies at the micro- and nano-scale that benefit watchmaking applications, micro- and nano-machining, microassembly, and efficient and environmentally-friendly fabrication processes,
- · to lead research into new technologies, concepts and high-performance materials for the watch industry, and means to integrate these results,
- · to train researchers and scientists to the forefront of these innovative technologies
- This will be accomplished by:
- · an internationally recognized fundamental research program that will deepen our understanding of fabrication processes that utilize novel materials,
- an applied research program aimed at innovative developments that bring a positive impact on performance and quality of watches of highest quality: new functionalities, improved accuracy, cost reduction and a lower environmental footprint.
- · continuous education, seminars and conferences for the watchmaking industry, with a communication strategy aimed at researchers and professionals in the field.

The Neuchâtel site of IMT-EPFL offers a particularly advantageous position for this chair by virtue of its central location in the Jura Arc, home to many of the key watchmaking companies, and of its historically very strong links to the diverse and well-established local high-technology industry. This new chair will enable a closer collaboration and coordinated strategy between academic research and the private sector.

As a faculty member of the School of Engineering, the successful candidate will be expected to initiate independent, creative research programs and participate in undergraduate and graduate teaching. Internationally competitive salaries, start-up resources and benefits are offered.

The EPFL is a dynamically growing and well-funded institution fostering excellence and diversity. It has a highly international campus at an exceptionally attractive location boasting first-class infrastructure. As a technical university covering computer and communication sciences, engineering, environment, basic and life sciences, management of technology and financial engineering, EPFL offers a fertile environment for research cooperation between different disciplines. The EPFL environment is multilingual and multi-cultural, with English often serving as a common interface

Applications should include a curriculum vitae with a list of publications, a concise statement of research and teaching interests, and the names of at least five referees. Applications should be uploaded in PDF format to the recruitment web site: micronano-search11.epfl.ch

Formal evaluation of candidates will begin on 15 January 2012 and will continue until the position is filled.

Enquiries can be addressed to: Prof. Nico de Rooij Search Chairman e-mail: micronano-search@epfl.ch

For additional information on EPFL, please consult the web sites: www.epfl.ch, sti.epfl.ch and imt.epfl.ch.

EPFL is committed to increasing the diversity of its faculty, and strongly encourages women to apply.

FACULTY POSITION IN CHEMISTRY DEPARTMENT OF CHEMISTRY Molecular Design Institute Arts and Science

The Department of Chemistry at New York University NYU, located in Greenwich Village in the heart of Manhattan, invites applications for a faculty appointment in supramolecular materials chemistry as part of its Molecular Design Institute (MDI). All areas will be considered, but applicants with expertise in polymer chemistry will receive special consideration. While we expect to hire at the junior level, exceptional senior level candidates will be considered. The anticipated start date is September 1, 2012, pending budgetary and administrative approval. The Department of Chemistry at NYU is implementing a significant growth plan, including the creation of the Molecular Design Institute and the Biomedical Chemistry Institute, and the recent hire of five senior and three junior faculty members.

Applicants should have an outstanding record of research and a commitment to teaching. Applications must include a curriculum vitae, a list of publications, and statements of future research and teaching plans. These materials, as well as three reference letters, must be submitted to our web-based application system using the following link:

http://www.chemistry.fas.nyu.edu/object/chem.nyufacultyjobpostings

Application review will begin **October 15, 2011.** If you have any questions about this position, please send an email to **chemistry.search@nyu.edu**.



NEW YORK UNIVERSITY

NYU encourages applications from women and members of minority groups and is an Equal Opportunity/Affirmative Action Employer.

TENURE TRACK POSITION 2012



Institute of Innovative Science and Technology

Tokai University is currently recruiting one tenure-track researcher for 2012 at the Tokai's IIST for a mentor researchers' development program that cultivates researchers who can conduct research of international stature. This recruitment is being carried out under the "Improvement of Research Environment for Young Researchers Program" supported by the Special Coordination Funds for Promoting Science and Technology, the Ministry of Education, Culture, Sports, Science and Technology. For more details, visit our website at http://www.u-tokai.ac.jp/tuiist/english/.

Research Field: Areas related to science and engineering

Qualifications: A doctoral degree obtained preferably within 10 years, more than three years of work experience as an assistant professor, a postdoctoral fellow or an equivalent position, and significant accomplishments in research are required. Japanese language ability is not required, but most communication during the tenure-track is in Japanese or English.

Term of Employment: April 1, 2012 through March 31, 2017 on an annual contract basis.

Application Documents: a) Prescribed application form downloaded from our website, b) five representative papers, and c) three letters of recommendation to be sent directly from your referees to us. Additional documents may be requested during the selection process.

Deadline: October 7, 2011, 5PM at Japan Standard Time

Submission of Application: Email your application documents at iist-office@ tsc.u-tokai.ac.jp, and send the hardcopies of your documents by postal mail with delivery confirmation (registered mail, etc.) to Tokai University Institute of Innovative Science and Technology, 4-1-1 Kitakaname, Hiratsuka City, Kanagawa 259-1292 JAPAN.



JOHNS HOPKINS U N I V E R S I T Y

FACULTY POSITION Department of Materials Science and Engineering and Sheridan Libraries

Assistant Research Professor and HSC Scientist (ARP/HSC)

The Department of Materials Science and Engineering and the Heritage Science for Conservation Lab at the Sheridan Libraries of Johns Hopkins University invite applications for an Assistant Research Professor. Jointly appointed by the Whiting School of Engineering's (WSE) Department of Materials Science and the Sheridan Libraries' Department of Conservation and Preservation this is a non-tenured and non-tenure track position with the title of Assistant Research Professor and HSC Scientist. The position will have dual reporting lines to the Director of Conservation and Preservation and the Chairman of the Department of Materials Science.

Major areas of interest include materials science, chemistry, and design engineering applied to paper and art conservation, and advanced analytical instrumentation. The position may be associated with other JHU research centers and/or conservation research institutions including, Canadian Conservation Institute, North Carolina State University, Maryland Institute College for the Arts, Walters Art Museum, and the Baltimore Museum of Art. Preference will be given to applicants at the assistant professor level with evidence of working on related areas of conservation science.

The successful candidate will be expected to manage and to implement the research priorities of HSC, to manage the HSC postdoctoral fellows and their projects, to build strong collaborations and partnership across departments and institutional affiliates, to engage in conservation science research and publication. The ARP/HSC scientist may lecture or conduct demonstrations and teach across JHU schools and disciplines in areas relating to heritage conservation science research. The ARP/HSC scientist will partner and collaborate with conservators in the Department as well as other institutions—in Baltimore and throughout the region—to advance knowledge, training, and education in the area of cultural heritage science research.

All applications should be submitted electronically as a single PDF document to materials@jhu.edu. A full description of the job responsibilities can be found at the DMSE website, http://eng.jhu.edu/wse/page/faculty-opportunities/ and the HSC website http://www.library.jhu.edu/departments/preservation/hcs/index.html. Applications should include a cover letter describing the principal expertise and accomplishments, a complete resume, statement of research interest, and the names and contact information for at least three references. For full consideration, applications should be received by October 1, 2011.

The Department is committed to building a diverse educational environment, women and underrepresented minorities are strongly encouraged to apply. The Johns Hopkins University is an EEO/AAA Employer.



A Department of Energy National Laboratory

Harry S. Truman Research Fellowship National Security Science and Engineering

Sandia National Laboratories is one of the country's largest research facilities employing 8,500 people at major facilities in Albuquerque, New Mexico and Livermore, California. Please visit our website at www.sandia.gov.

We are searching for outstanding PhD candidates to apply for the Harry S. Truman Research Fellowship in National Security Science and Engineering. The Truman Fellowship provides the opportunity for recipients to pursue independent research of their choosing that supports Sandia's national security mission. Candidates are expected to have solved a major scientific or engineering problem in their thesis work or will have provided a new approach or insight to a major problem, as evidenced by a recognized impact in their field.

Candidates must have received a PhD degree within the past three years, or will complete all PhD requirements by commencement of appointment, with a broad-based background and extensive knowledge of research in one or more of the following focus areas: bioscience, computers and information science, engineering sciences, materials science and technology, microelectronics and microsystems, and pulsed power. Candidates must be seeking their first national laboratory appointment (pre postdoc internships excluded), have excellent academic (minimum 3.5 undergraduate and 3.7 graduate GPA preferred) and research qualifications, good communication skills, and enjoy working in a team-oriented, dynamic environment.

This initial one-year appointment may be extended, at management's discretion, for two additional one-year appointments. The salary is \$111,200 per year plus benefits and additional funding for the chosen research proposal. This position requires a United States Department of Energy security clearance, which requires United States citizenship.

For complete application instructions, please visit http://www.sandia.gov/careers/fellowships.html#truman.

Please submit the complete package to Yolanda Moreno, Sandia National Laboratories, P.O. Box 5800, MS 0359, Albuquerque, New Mexico 87185-0359, or email ymoreno@sandia.gov, or fax 505-845-0580. Please reference Job #638406. All materials and online application must be received by COB December 5, 2011.

LOCKHEED MARTIN

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

NANO-OPTO-ELECTRONIC MATERIALS AND DEVICE SCIENTIST Zena Technologies, Inc.

Zena Technologies is a startup company creating advanced technologies for light collection and manipulation. Zena Technologies is seeking candidates for employment to work on the development of new nano elecrooptic structures for imaging and detection. The positions involve cutting edge research in the detection and imaging of UV, visible, and IR light.

A PhD or MS degree in Chemistry or Materials Science with a minimum of five years of experience in semiconductor device fabrication, knowledge of materials used in semiconductor fabrication, and knowledge of and experience in sample and device characterization are required.

In addition, industry experience in some of the following areas is desired:

- 1. shallow dopant implantation
- 2. high precision sub micron etching
- 3. quantum dot or nano-wire fabrication
- 4. strong familiarity with as many possible varieties of CVD/ALD as possible

Familiarity with photo detectors is a plus.

The successful candidate should bring experience, enthusiasm, and dedication to the group. A strong drive to succeed in nano opto-electronics research is essential. Candidates with experience in the fabrication of photo detectors would be well suited for this position. The successful candidate will conduct research in collaboration with a team at the School of Engineering and Applied Sciences at Harvard University as well as other members of Zena Technologies.

Applications should contain a curriculum vitae (CV), full list of publications, a letter (one-page maximum) describing their strengths for this research project, and names and contact details for three persons who may be asked for references. Applications should be emailed in PDF format to **mwober@zenatechnologies.com**.

Salaries are very competitive and commensurate with experience. Review of applications will begin immediately. Starting date is flexible, but preferably sooner than **October 2011**.

> Zena Technologies is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.



U.S. DEPARTMENT OF ENERGY

POSTDOCTORAL RESEARCH ASSOCIATE

"In-situ Electron Microscopy of nucleation and growth of ferromagnetic nanocrystals"

Division of Materials Sciences and Engineering Iowa State University

Newly formed Emergent Atomic and Magnetic NanoStructures group at the Ames Laboratory is seeking a motivated applicant for a postdoctoral research associate position with a focus on the use of combination of cryo-electron microscopy, Fluid Cell TEM, and electron tomography methods for high resolution EM studies of the nucleation and evolution of crystal structure and ferromagnetism in templated nanostructures, including single nanoparticles. This position, funded by the US DOE, is a one year term appointment with the possibility of renewal for up to three years based upon satisfactory job performance.

Qualifications include: 1) PhD degree in chemistry, physics, material sciences, or a related field; 2) Experience in TEM specimen preparation and handling. Low dose cryo-EM imaging of biological samples and familiarity with off-axis electron holography a plus; 3) Demonstrated hands-on laboratory experience; 4) Expertise with Origin, Labview, Matlab, COMSOL, CAD programs and basic machining skills is preferred. The Appointee will develop, test and optimize on-the-EM-window in-situ templated synthesis of magnetic nanocrystalline particles, and will work with novel micro (and nano) fluidic devices. Salary is commensurate with education and experience.

Interested candidates should send an application letter outlining research expertise and interests and availability, a current CV including publications, and names and contact information for three references to Dr. Tanya Prozorov at **tprozoro@ameslab.gov**. Starting date is as soon as possible and the search continues until vacancy is filled.

> Ames Laboratory/lowa State University is an EO/AA employer.

TENURE-TRACK ASSOCIATE PROFESSOR IN MATERIALS INNOVATION

Department of Organic Polymeric Materials

Tokyo Institute of Technology (Tokyo Tech) in Japan invites applicants for a Tenure-Track Associate Professor position in Materials Innovation in the Department of Organic Polymeric Materials. Specific areas of interest include:

Organic Materials | Nanotechnology | Materials Creation

Tokyo Tech has always been keen to attract top-quality young researchers from all over the world. For this purpose, Tokyo Tech has been implementing a Tenuretrack system since 2006. The main objectives of this system are to recruit and retain outstanding scientists by offering them a clear career path. In the longer term, successful tenure-track faculty members will progress to the key positions within Tokyo Tech through a fair and transparent evaluation process. They will be provided with research funds and independent research environment, and also be expected to pursue and supervise scientific research as a principal investigator and provide academic education in the graduate or undergraduate school.

The department is seeking candidates who are committed to high standards and professionalism in their areas of expertise. The candidate should have a PhD degree in natural science or engineering preferably no earlier than April, 2002, and should have English-language proficiency. Japanese proficiency is not required to apply, however, it will be necessary on a daily basis after employment. To apply for the position, please visit our website at http://www.tenure-track.titech.ac.jp/.

Deadline Date for Online Entry: October 21, 2011

Deadline for Submission of Application Documents: October 28, 2011

Office of Tenure-Track System Tokyo Institute of Technology Phone: +81-3-5734-7627 E-mail: **tt.apply@jim.titech.ac.jp**

ΠΤΕΓΙ



Faculty Positions NanoScience Technology Center

The NanoScience Technology Center (NSTC) (www.nanoscience.ucf.edu) at the University of Central Florida (UCF) in Orlando invites applications for three tenure-track faculty positions in the areas of nano-bio sciences, metamaterials, or related fields. Both experimental and theoretical researchers will be considered. A suitable candidate must have a PhD degree and is expected to teach in their discipline.

The search will be conducted jointly by NSTC and the Advanced Materials Processing and Analysis Center, which together consist of 22 faculty (10 NSF CAREER, ONR YIA, DARPA YIA), and over 120 graduate students, PostDocs, and staff. Competitive packages are available, and collaboration with researchers in academic departments and other UCF centers, including CREOL, FSEC, and BMSC, is encouraged. UCF has over 56,000 students and is ranked third in the IEEE's table of universities' patent portfolios.

The review of candidates will begin August 1, 2011 and continue until the position is filled. The on-line application at www.jobswithucf.com/applicants/Central?quickFind=76592 and www.jobswithucf.com/applicants/Central?quickFind=76593 requires a CV, research plans, teaching philosophy, and list of three references. For questions please contact Mari Pina, at mari@ucf.edu. Only online applications will be considered.

UCF is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply. As an agency of the State of Florida, UCF makes all application materials, including transcripts, and selection procedures available for public review upon request.



Duke Energy Postdoctoral Fellowship ELECTRON MICROSCOPIST

UNCC is seeking a postdoctoral-level electron microscopist whose primary role is to lead the operation and the user program of the transmission electron microscope and its peripheral facilities on the campus (http://coefs.uncc.edu/ ttxu/transmission-electron-microscopy-lab/), and to conduct original research with advanced TEM-based techniques. Major responsibilities include teaching of TEM labs, user training and service, and on/off campus collaborations on research projects.

The candidate should have (1) a PhD degree in one of the following areas: Materials Science, Physics, Chemistry, Engineering; (2) solid theoretical and practical understanding and skills in the various aspects of TEM; (3) at least three years of operation and maintenance experience in TEM and sample preparation, and (4) strong oral and written communication skills. The position is under the auspice of the Charlotte Research Institute–Duke Energy Postdoctoral Fellowship Program.

The applicant should submit electronically a current curriculum vitae, a summary of expertise and accomplishments, and the contact information of three references to Dr. Terry Xu at **ttxu@uncc.edu**. Review of candidates will begin immediately, and will continue until the position is filled. The candidate is expected to start the work in January 2012.

The University of North Carolina at Charlotte is an Affirmative Action/Equal Opportunity employer Women, minorities, veterans, and individuals with disabilities are encouraged to apply.



RESEARCH ASSISTANT SCIENTIST Department of Materials Science and Engineering

Department of Materials Science and Engineering

The Department of Materials Science and Engineering at the University of Florida seeks a research assistant scientist who will conduct applied research in the field of optical properties and spectroscopy of energetic materials. The chosen candidate will apply and further develop ultraviolet differential reflectometry applied to the detection of energetic materials, and will be expected to publish research results, write grant proposals, and present results at national conferences. Additionally, the chosen candidate will prepare a business plan for the commercialization of the detection equipment developed during this appointment.

This position requires a PhD degree, postdoctoral experience in optical properties and detection of energetic materials, and a master of science in business administration or management. Published evidence of scientific contributions of pertinent research is expected.

Candidates should send a cover letter stating their qualifications and when they are available, curriculum vitae, and relevant publications to R.E. Hummel at **rhumm@mse.ufl.edu**. Please reference **position number 00009475**.

The University of Florida is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority group members. According to Florida law, applications and meetings regarding applications are open to the public on request.