

ASSISTANT PROFESSOR IN THE ENERGY CLUSTER

University of Pennsylvania

As part of a larger investment to create the new Vagelos Institute for Energy Science and Technology, the School of Arts and Sciences at the University of Pennsylvania seeks to add faculty to our newly formed Energy Cluster spanning the natural sciences. We invite applications for a tenure-track assistant professor position in one of the following departments: Biology, Chemistry, Earth and Environmental Science, or Physics & Astronomy. Exceptional senior candidates will also be given consideration.

The successful candidate will mount an innovative program of fundamental scientific research that impacts our societal energy challenges, broadly defined, and in doing so will forge collaborative links with other Penn scientists and engineers involved in energy research. Applicants must apply online at <http://facultysearches.provost.upenn.edu/postings/937>. Required application materials include: curriculum vitae with a list of publications, a research statement that includes the candidate's perspective on how she or he fits into one of the four departments and identifies potential collaborative links with other natural science departments, and a teaching statement. Applicants should also submit the names and contact information for three individuals who will provide letters of recommendation. Review of applications will start on **October 15, 2016** and will continue until the position is filled.

The School of Arts and Sciences is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence and to establishing a more diverse faculty (for more information see: <http://www.upenn.edu/almanac/volumes/v58/n02/diversityplan.html>).

The University of Pennsylvania is an equal opportunity employer. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.



FACULTY POSITIONS— OPEN RANK

Materials Science and Engineering
University of Illinois at Urbana–Champaign

The Department of Materials Science and Engineering at the University of Illinois at Urbana–Champaign is seeking exceptional candidates for faculty positions in the broad areas of materials science and engineering, materials chemistry, or materials physics. Applications for positions as tenure-track assistant professors, tenured associate professors, and tenured full professors are welcome. Faculty members in the Department teach undergraduate and graduate courses and are expected to initiate and sustain a vigorous research program.

Please visit the website <http://matse.illinois.edu/openings.html> to view the complete position announcement and application instructions. Applications received prior to **December 5, 2016** will receive full consideration.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.

Illinois is an EEO Employer/Vet/Disabled (www.inclusiveillinois.illinois.edu) and committed to a family-friendly environment (<http://provost.illinois.edu/worklife/index.html>).



Georgia Tech School of Materials Science and Engineering

FACULTY OPENINGS

Materials Science and Engineering

The School of Materials Science and Engineering (MSE) at the Georgia Institute of Technology (GT) seeks to add tenure-track faculty who have an established record of nationally and internationally recognized excellence in research and leadership. Outstanding candidates with demonstrated expertise in materials science and engineering featuring some combination of synthesis, processing, theory, computations, data analytics, and/or high-throughput experimentation are sought. Exceptional candidates may also be considered for the College of Engineering interdisciplinary hire in Data-enabled Design and Manufacturing. These positions are designed to enhance the broad research portfolio of MSE at Georgia Tech that spans all forms and classes of materials.

Qualified candidates must possess a PhD degree in Materials Science and Engineering or a closely related discipline. Successful candidates will be expected to provide leadership in research programs that cut across several academic programs. The ideal candidate will champion independent and collaborative research at the cutting edge of his/her field and be able to attract external funding to build strong sponsored-research activities. The top candidate will also be expected to successfully mentor graduate students, and develop and teach fundamental courses at the undergraduate and graduate levels in materials science and engineering.

Interested applicants must submit an online application, which includes a cover letter, curriculum vitae, statements of research interest and teaching philosophy, and the names (and contact information) of at least five references, at <http://www.mse.gatech.edu/content/faculty-positions>.

Applicants are strongly encouraged to submit their completed application package by **December 2, 2016** to ensure full consideration. The selection process will include passing a pre-employment background screening.

The Georgia Institute of Technology is an Affirmative Action/Equal Opportunity Employer.



Assistant Professor of Materials Engineering



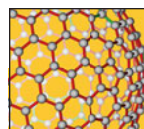
The Department of Chemical and Materials Engineering at the University of Kentucky invites applications for a tenure-track faculty position in materials engineering at the Assistant Professor level with an anticipated start date of Fall 2017. Applicants should hold a PhD degree in Materials Science and Engineering or a closely related field with a strong record of research accomplishments and the capability to develop an active and nationally recognized research program. The successful candidate must demonstrate a strong commitment to undergraduate and graduate education and be qualified to teach courses in materials engineering.

Applications are sought from qualified individuals working in research areas that complement existing department strengths and that will enhance areas targeted for future collaboration and growth; priority will be given to applicants with a record of research accomplishments in (i) advanced characterization techniques; (ii) biomaterials; (iii) metallurgy.

Candidates should apply for the position at <http://ukjobs.uky.edu/postings/118866>; the deadline for acceptance of applications is **November 15, 2016**. Submit PDF files consisting of a letter of interest, complete curriculum vitae, statement of research goals, statement of teaching philosophy and experience, and the names and contact information for at least three references.

For more information, contact Prof. Douglass Kalika at douglass.kalika@uky.edu. Information on the Department can be found at <http://www.engr.uky.edu/cme>.

The University of Kentucky is an Equal Opportunity University. We encourage applications from all interested and qualified individuals.



ENGINEERING
TEXAS A&M UNIVERSITY

POSTDOCTORAL RESEARCH ASSOCIATE

Department of Materials Science and Engineering

NOV# E00149FY16

POSITION SUMMARY

Contribute to research programs in the new laboratory of Professor George M. Pharr related to nanoindentation and small-scale mechanical behavior of materials, in particular, building and using a new experimental facility for studying deformation and fracture at the micro- and nano-scales. Will perform research activities of an independent nature in a technically/scientifically specific realm for a period of duration not to exceed between two and three years.

QUALIFICATIONS

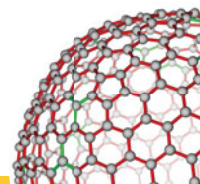
Education: PhD degree in Materials Science, Mechanical Engineering, or related discipline.

Experience: Candidate must have significant experience in mechanical testing, ideally at small-scales; general interests and expertise in experimental studies that focus on the mechanisms of deformation and fracture in solids. Experience with scanning electron microscopy, focused ion beam milling, and/or high temperature mechanical testing is desirable.

APPLICATIONS

Apply at the Texas A&M Engineering Jobs website at www.tameengineeringjobs.com.

Texas A&M University System is an Affirmative Action/ Equal Opportunity Employer Committed to Diversity.



Call for Assistant Professors and Professors



IST Austria invites applications for **Tenure-Track Assistant Professor** and **Tenured Professor** positions to lead independent research groups in all areas of

PHYSICS

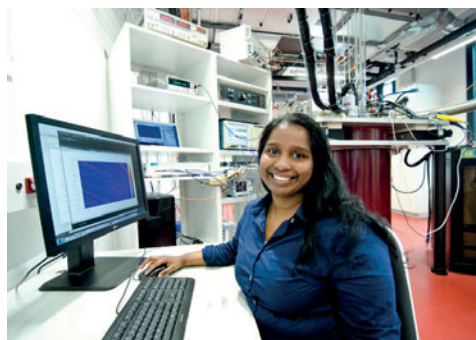
Applicants in condensed matter physics, bio- and soft matter physics, atomic physics and physical chemistry as well as cross-disciplinary areas are particularly encouraged to apply. IST Austria is in the process of building up a **new physics cluster including a micro- and nanofabrication facility** (300 m² clean room ISO classes 5-7). Our focus is on experimental physics, outstanding theoreticians will be considered as well.

IST Austria is a recently founded public institution dedicated to basic research and graduate education near Vienna. Currently active fields of research include biology, neuroscience, physics, mathematics, and computer science. IST Austria is committed to become a world-class centre for basic science and will grow to about 90 research groups by 2026. The institute has an interdisciplinary campus, an international faculty and student body, as well as state-of-the-art facilities. The working language is English.

Successful candidates will be offered competitive research budgets and salaries. Faculty members are expected to apply for external research funds and participate in graduate teaching. Candidates for tenured positions must be internationally accomplished scientists in their respective fields.

DEADLINES: Open call for Professor applications. For full consideration, Assistant Professor applications should arrive on or before November 3, 2016. Application material must be submitted online: www.ist.ac.at/professor-applications

IST Austria values diversity and is committed to equal opportunity. Female researchers are especially encouraged to apply.





ASSISTANT PROFESSOR

Materials Department
University of California, Santa Barbara

The Materials Department in the College of Engineering at the University of California, Santa Barbara is seeking applications for an Assistant Professor position (tenure-track) in Materials, with the start date of July 1, 2017 or later.

Outstanding candidates should demonstrate the ability to build a world-class research program in the area of soft and/or hierarchically structured materials, broadly interpreted. We particularly encourage applications from candidates working at the intersection of biomaterials and mechanics, soft and biologically inspired composites, and functional materials for optics, sensing, actuation and other physical, chemical, or biological applications. Candidates with experience in experimental or computational methods for modeling, characterization, and/or synthesis are encouraged to apply. The successful candidate must possess a PhD degree in a science or engineering field by the time of appointment.

Applications consisting of a résumé, brief statements of teaching philosophy (1-page limit) and research interests (3-page limit), a cover letter, and the names and addresses of three references should be submitted online at <https://recruit.ap.ucsb.edu/apply/JPF00809>.

Please apply by **November 30, 2016** for primary consideration; however, the position will remain open until filled.

The Materials Department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching, and service.

The University of California is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

TENURED OR TENURE-TRACK FACULTY POSITION

Chemical Engineering and Materials Science
University of Minnesota

The Department of Chemical Engineering and Materials Science at the University of Minnesota (www.cems.umn.edu) seeks to fill a faculty position at the Assistant (tenure-track), Associate (tenured), or Full Professor (tenured) level, commensurate with experience. Outstanding candidates with a PhD degree in any area related to materials science or chemical engineering will be considered. Candidates should have a distinguished academic and research record and a commitment to teaching in a highly interdisciplinary department.

Applications consisting of a cover letter, CV (including a list of publications), research statement, teaching statement, and a list of three references with contact information should be submitted online at <http://z.umn.edu/facultymse>. Additionally, the posting can be accessed through the Department website: www.cems.umn.edu/news/faculty-search. Review of the applications will begin immediately and continue until the position is filled. The successful candidate will be in place as early as Fall 2017.

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

FACULTY POSITIONS

Materials Science and Engineering | University of Pennsylvania

The Department of Materials Science and Engineering is engaged in an aggressive, multi-year hiring effort for multiple tenure-track positions at the assistant professor level. Exceptional applicants for tenured associate and full professor positions may also be considered.

Applicants from all materials-related research areas are invited to apply, especially those with expertise in (1) electronic and optical materials and (2) materials for health sciences.

Electronic and Optical Materials: New low-dimensional materials with novel properties will lead to new optoelectronic and quantum device paradigms and applications. In low-dimensional materials the interplay of geometry, topology, mechanical deformations, and symmetry breaking fields can drastically modify their electronic, optical, and photonic properties and produce new phases of matter with precisely tunable responses. For example, the combined effects of symmetry and topology in materials' electronic structures have led to the discovery of topological insulators, topological superconductors, and Dirac semimetals. New layered materials and their heterostructures are a rich and emerging source for exploring new electronic and optical phenomena that are unattainable in conventional material systems. Foundational research on these emerging materials will have significant impact for future applications including quantum computing, photonics and sensing, particularly research areas that focus on (i) atomically precise synthesis, growth or assembly of quantum materials, (ii) designing novel materials, probes and device platforms to evaluate new theories and expand the fundamental understanding of these electronic, optical and optoelectronic properties, and (iii) engineering materials with innovative functionalities for future technologies. Prof. Ritesh Agarwal chairs this search committee.

Materials for the Health Sciences: Materials continue to enable innovation in the health sciences, particularly in the areas of medical and dental implantable devices, advanced imaging and sensing, injury reduction, drug delivery, and stimulating tissue regeneration, formation and repair. By the judicious design of the chemical compositions and materials processing methods, the micro- and nanostructures and surfaces can be controlled to provide the desired combinations of properties and functionalities. Materials performance can be further advanced by incorporating biological components, including cells and proteins. Fundamental materials research will ignite future breakthroughs in the healthcare industry including tissue engineering and regenerative medicine, therapeutic delivery, repair of injuries, and next-generation devices for advanced imaging and sensing, as well as providing model materials for studying biological systems. Prof. Vivek Shenoy chairs this search committee.

Applications must be submitted online <http://facultysearches.provost.upenn.edu/postings/943> and include a cover letter, a complete curriculum vitae, a short (5-page limit) research statement, a teaching statement and the names of three references (with contact information) who could provide letters of recommendation. The cover letter should describe the applicant's most significant scientific accomplishment as a graduate student and as a postdoc, the applicant's overall goals/vision for a research program at Penn, and the experience and qualifications that make the applicant particularly well-suited to achieve those goals. For important context consider the School of Engineering and Applied Science's strategic plan (<http://www.seas.upenn.edu/PennEngineering2020/>).

Review of applications will begin immediately with a target deadline of **November 1, 2016**.

The University of Pennsylvania is an affirmative action/equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, color, religion, sex, sexual orientation, gender identity, creed, national or ethnic origin, citizenship status, age, disability, veteran status, or any other characteristic protected by law.



SAN DIEGO STATE
UNIVERSITY

Mechanical Engineering

FACULTY POSITION

Multiscale Modeling of Materials

The Department of Mechanical Engineering seeks to fill a tenure-track position at the Assistant Professor level in the area of multiscale computational modeling of material systems starting Fall 2017. Mechanical Engineering is one of the four departments in the College of Engineering at San Diego State University with an EAC, ABET-accredited BS degree program, as well as MS and joint PhD programs. The department has internationally recognized programs in material science and processing, mechanics, energy and thermofluids, bioengineering, MEMS, NEMS, sensors, robotics, dynamic systems and control. It is anticipated that the person will develop synergies with areas of existing research strength and exploit emerging areas of research by developing a vigorous externally funded research program in the general area of multiscale computational modeling of material systems. A demonstrated ability to collaborate across disciplinary boundaries is essential. The department shares with the College of Engineering and the University a strong commitment to excellence in undergraduate and graduate education. He or she is expected to supervise teams of undergraduate as well as graduate students. Applicants must have a demonstrated ability to teach undergraduate and graduate level classes in material science, materials processing, computational materials, and other related areas of mechanical engineering.

For more information about the department, college and university, please visit: <http://mechanical.sdsu.edu>, <http://engineering.sdsu.edu>, and <http://www.sdsu.edu>.

Applicants must have an earned PhD degree in mechanical engineering or a closely related discipline. Applications must be received by **November 15, 2016** to receive full consideration; the position will remain open until filled. Candidates must apply via Interfolio at <http://apply.interfolio.com/36271>. Questions may be directed to the Search Committee Chair at MEMMsearch@engineering.sdsu.edu.

SDSU is a Title IX, equal opportunity employer.

ASSISTANT PROFESSOR



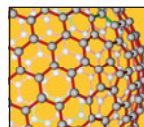
Experimental Quantum Condensed Matter Physics University of Pennsylvania

The Department of Physics and Astronomy at the University of Pennsylvania seeks applications from outstanding candidates for an appointment as Assistant Professor in experimental quantum condensed matter physics. Appointment at higher rank can be considered in truly exceptional cases. The successful candidate will develop an innovative research program on quantum phenomena in modern materials that attracts the participation of graduate and undergraduate students and creates collaborative links with other Penn scientists and engineers. We anticipate the candidate's program will contribute actively to the Laboratory for Research on the Structure of Matter and the newly established Singh Center for Nanotechnology.

Applicants must apply online at <http://facultysearches.provost.upenn.edu/postings/952>. Required application materials include: curriculum vitae with a list of publications, a research statement and a teaching statement. Applicants should also submit the names and contact information for three individuals from whom we will request letters of recommendation. Review of applications will begin no later than **November 1, 2016** and will continue until the position is filled.

The Department of Physics and Astronomy is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence and to creating a more diverse faculty (for more information see: <http://www.upenn.edu/almanac/volumes/v58/n02/diversityplan.html>).

The University of Pennsylvania is an EOE. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.



ENGINEERING
TEXAS A&M UNIVERSITY

TENURE-TRACK ASSISTANT, ASSOCIATE OR FULL PROFESSOR Department of Materials Science and Engineering

POSITION SUMMARY

Tenure-track faculty positions at the assistant, associate, or full professor level with expertise in the mechanical behavior of advanced structural materials, including hard and soft materials and composites. Opportunity to interface with growing interests and capabilities at the University in mechanical phenomena at very small scales (micro- and nano-) and how they control deformation and failure. The successful applicant will be required to teach, advise, and mentor graduate students; develop an independent, externally funded research program; participate in all aspects of the department's activities, and serve the profession.

QUALIFICATIONS

Education: PhD degree in Materials Science, Mechanical Engineering, or related discipline.

Experience: Candidate must have relevant expertise with new mechanical testing methods, including those used at small scales, and/or advanced microstructural characterization techniques for examining deformation microstructures. Highly qualified candidates in other areas of materials science and engineering will also be considered, especially if their research interests cut across multiple disciplines.

APPLICATIONS

Submit a cover letter, curriculum vitae, teaching statement, research statement, and three to five references. Full consideration will be given to applications received by **December 1, 2016**. Apply at the Texas A&M Engineering Jobs website at www.tameengineeringjobs.com. No applications outside the www.tameengineeringjobs.com will be considered.

Texas A&M University System is an Affirmative Action/Equal Opportunity Employer Committed to Diversity.