جامعة الملك عبدالله
للعلوم والتقنية
King Abdullah University of
Science and Technology

Faculty Positions

MATERIALS SCIENCE AND ENGINEERING

The Physical Sciences and Engineering (PSE) Division at King Abdullah University of Science and Technology (KAUST) (http://pse.kaust.edu.sa) invites qualified applicants to apply for faculty positions at all ranks (Assistant, Associate and Full Professor) in the Materials Science and Engineering program.

KAUST offers superb research facilities, generous assured research funding and internationally competitive salaries. The science produced in PSE focuses on understanding, modeling and manipulating matter at all scales (nano, meso and macroscopic levels), in all forms (bulk, thin films, divided colloids, fluid flows, the earth as system, etc.) and in interaction with external stimuli (light, heat, fluids, stresses, etc.). The knowledge produced serves to help design and engineer cutting-edge materials, technologies and systems.

The Materials Science and Engineering (MSE) program at KAUST currently has 11 full-time faculty members doing research in the areas of materials synthesis and design, inorganic/organic electronics, alternative energy, advanced characterization, computational methods, nanoscale materials and devices and other related areas. These research focuses are enhanced by strong support from KAUST's international research collaboration networks and advanced central research facilities, which include the Nanofabrication, Imaging and Characterization, Analytical Chemistry, Supercomputing, and Scientific Visualization core laboratories. More information about the MSE program and its related research activities is available at: http://mse.kaust.edu.sa.

We invite applications from exceptional candidates for faculty positions at all ranks in the following areas:

- **Inorganic solar cells**
- **Si based solar cells**
- **Solar cell modeling and design**
- **Physics of light-matter interaction/materials for photonics**
- **Physics of low dimensional systems**
- **Nanocomposites**
- **Materials characterization by high spatial resolution atom probe tomography, in particular for soft materials.**

Applicants should have a proven track record, a relevant Ph.D. degree and the ability to establish a high-impact research program. They should also have demonstrable commitment to teaching at the graduate level.

Applicants should apply at the **http://apptrkr.com/538683** employment site.

Applicants will be required to complete a brief application form. They must also upload a single PDF file including the following: a complete curriculum vitae, a list of publications, a research plan, and a statement of teaching interests.

Applications received by January 31, 2015 will receive full consideration. Positions will remain open until filled.

www.kaust.edu.sa

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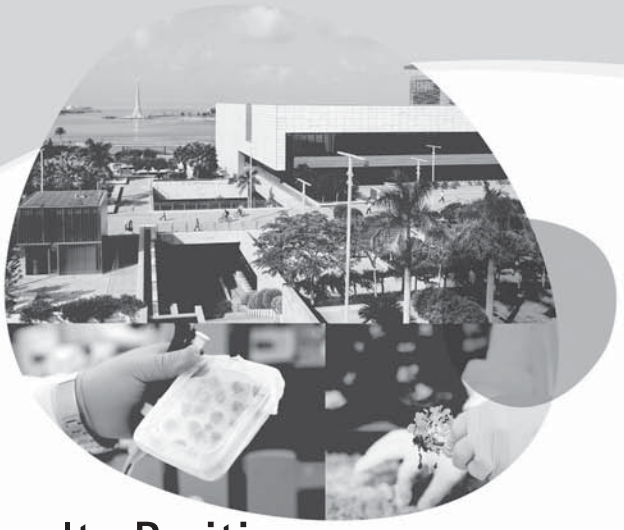

جامعة الملك عبدالله للعلوم والتقنية
King Abdullah University of Science and Technology

Faculty Positions

Chemical and Biological Engineering

The Physical Sciences and Engineering (PSE) Division (http://pse.kaust.edu.sa) at King Abdullah University of Science and Technology (KAUST) invites qualified applicants to apply for faculty positions at all ranks (Assistant, Associate and Full Professor) in the Chemical and Biological Engineering program.

KAUST offers superb research facilities which includes the BioScience and Bioengineering and Analytical Core laboratories, generous assured research funding and internationally competitive salaries. The science produced in PSE focuses on understanding, modeling and manipulating matter at all scales (nano, meso and macroscopic levels), in all forms (bulk, thin films, divided colloids, fluid flows, the earth as system, etc.) and in interaction with external stimuli (light, heat, fluids, stresses, etc.). The knowledge produced serves to help design and engineer cutting-edge materials, technologies and systems.

The Chemical and Biological Engineering program offers opportunities to develop real-world solutions to global challenges by leveraging basic discoveries in the chemical and biological sciences. The successful candidate will focus his/her research in the following areas of expertise:

Process Modeling and Design
- Solid academic/industrial background
- Conduct design, optimization and cost analysis of membrane and conventional separation processes
- Teach advanced principles of process design and control.

Advanced Water Treatment Processes/novel Membranes (Senior-level Position)
- Background and strong knowledge in the water industry
- Expertise in industry and academia

Biomolecular Engineering (Senior-level Position)
- Development and leadership of the Biomolecular Engineering program
- Well-established research in areas such as biomaterials, tissue engineering, bioprocess engineering or biomedical engineering

Reactor Design and Process Engineering (Position Open in Kaust Catalysis Center: http://kcc.kaust.edu.sa)
- Specialize in heterogeneous or photo catalysis
- Scale up reactors in the field of water splitting, high temperature catalytic processes and processes for air-sensitive catalysts
- Expertise in academia, industry or both

Applicants should have a proven track record to establish a high-impact research program, and should have a commitment to high-quality teaching at the graduate level.

To learn more about the PSE Division and complete the online application form, visit **http://apptrkr.com/546575**. Application requirements include the following:

- Updated curriculum vitae with a full list of publications
- Statement of research
- Statement of teaching interests
- Contact details of at least four potential referees.

Applications received by January 31, 2015 will receive full consideration. Positions will remain open until filled.

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BINGHAMTON UNIVERSITY
STATE UNIVERSITY OF NEW YORK

Tenured Faculty Position in Solar Energy

Binghamton University invites applications for a tenured faculty position in the area of solar research. The University, SUNY and New York State have identified smart energy as an area of strategic emphasis. The campus anticipates making multiple hires in this area within the next several years. This is an affiliated position for the University's SMART Energy Transdisciplinary Areas of Excellence (TAE). For more information on the TAE go to http://www.binghamton.edu/tae.

The successful candidate, to be hired as an associate or full professor, will take a leadership role in solar research on campus including the directorship of the Center for Autonomous Solar Power. Candidates should supplement and complement current campus strengths in the area of smart energy. The successful candidate, to start by the fall of 2015, will initiate an externally funded research program that will support postdoctoral, graduate and undergraduate students. He or she will teach undergraduate and graduate courses in chemistry, physics or engineering. The successful candidate will have a tenure berth in one of the following departments: Chemistry, Electrical Engineering, Industrial Engineering, Mechanical Engineering or Physics. The successful applicant may also be affiliated with the Materials Science & Engineering Graduate Program. The on-line application link is available at:

http://binghamton.interviewexchange.com/jobofferdetails.jsp?JOBID=55419

Binghamton University is an AA/EO institution.

The University of Wisconsin-Madison
Tenured Faculty Positions for Thrust Area Leaders

graingerinstitute.engr.wisc.edu

The **College of Engineering** at the University of Wisconsin-Madison invites applications from Thrust Leader candidates for one tenured full-professor position in the broad area of advanced manufacturing and one tenured full-professor position in the broad area of accelerated materials discovery. Each Thrust Leader will be appointed as a Grainger Institute Fellow within the newly launched **Grainger Institute for Engineering** and will have appointments in one or more academic departments within the **College of Engineering**.

The **Grainger Institute for Engineering** serves as a research incubator within the **College of Engineering** and aims to foster a trans-disciplinary research and educational environment for addressing grand technological challenges. Thrust Leaders will play a key role in realizing that vision by creating and growing new multi-faculty research initiatives within the Institute. Initial broad areas targeted by the Institute are advanced manufacturing and accelerated materials discovery.

Successful candidates will be expected to maintain a world-class extramurally funded graduate research program on problems that are relevant to the needs of the profession and of society. They will also contribute to the education and professional development of undergraduate and graduate students, and engage in department, college, university, community, and professional service activities as appropriate.

Anticipated start date is August 2015.
For a complete position description and how to apply:
go.wisc.edu/GIE-thrust

Application deadline is Jan. 20, 2015.
Applications received after Jan. 20 may be considered if the position has not been filled.

UW-Madison is an equal opportunity/affirmative action employer. Madison, Wisconsin, is consistently ranked as one of the top cities in the nation with the highest quality of life.

Program Head
Graduate Program in Acoustics

The Penn State College of Engineering invites nominations and applications for the position of Head of the Graduate Program in Acoustics. The Program has a 50-year history of excellence in acoustics and seeks an individual who will provide innovative and energetic leadership for the future. The successful candidate must have academic credentials commensurate with the rank of professor with tenure; a strong record of and commitment to education, research and service in acoustics; proven administrative skills; and a widely recognized reputation in acoustics.

The Program is internationally recognized as a leading academic program dedicated to acoustics, known for the quality of its students, its research and educational programs, and leadership of the profession. It is the only Ph.D. granting acoustics program in the nation, with over 650 masters and doctoral degrees granted since its inception. The breadth of acoustics as a discipline is relevant to every department in the College of Engineering (www.engr.psu.edu) and many outside. The Program is also a strategic partner with the Penn State Applied Research Laboratory (www.arl.psu.edu) and maintains close connections with industry through the Center for Acoustics and Vibration (http://www.cav.psu.edu/).

Current research and teaching activities include core topics such as aero- and hydro-acoustics, structural acoustics, underwater acoustics, physical acoustics and bioacoustics. A goal of the Program is to broaden these themes across the University to include greater emphasis in materials science, biomedical, geosciences, environmental acoustics and others. Additional information is available at www.acs.psu.edu.

The Program's faculty consists of a small core group and over 40 faculty members from other academic departments and the Applied Research Laboratory. The Program offers over 20 regularly scheduled acoustics courses either on the University Park Campus or through a distance learning option. Approximately 100 students are currently enrolled in Master's and Ph.D. degree programs in Acoustics.

The Program Head position is a tenured faculty position. The administrative responsibilities as Head are nominally half time, with the other half time devoted to teaching, research, and service typical of a senior tenured faculty. The Graduate Program in Acoustics is administratively aligned with the Department of Aerospace Engineering, yet exercises independent control over its educational and research programs.

Nominations and applications will be considered until the position is filled. Screening of applicants will begin on January 1, 2015 and it is intended that the position be filled by the beginning of the 2015/16 academic year. Applicants should submit a statement of professional interests, a curriculum vitae, and the names and addresses of four references. Please submit these three items electronically to job 54810 at **apptrkr.com/551340** Applications will be treated with the strictest confidence. Inquiries can be made to Anthony Atchley via e-mail to atchley@psu.edu or by phone at: (814) 865-2151.

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to http://www.police.psu.edu/clery/ , which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to minorities, women, veterans, disabled individuals, and other protected groups.

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Faculty Positions
Chemical Science

The Physical Sciences and Engineering (PSE) Division (http://pse.kaust.edu.sa) at King Abdullah University of Science and Technology (KAUST) invites qualified applicants to apply for faculty positions at all ranks (Assistant, Associate, and Full Professor) in the Chemical Science Program.

KAUST offers superb research facilities which include the Analytical, the Nanofabrication and Thin film and the Imaging and Characterization core laboratories, generous assured research funding and internationally competitive salaries. The science produced in PSE is about understanding, modeling, and manipulating matter at all scales: nano, meso, and macroscopic levels; in all forms: bulk, thin films, divided colloids, fluid flows, earth as system etc. and in interaction with external stimuli: light, heat, fluids, etc. or stresses. The knowledge created serves to design and engineer materials, technologies, and systems.

The Chemical Science Program is concerned with chemistry in all its facets including those addressed in KAUST Research Centers, particularly in Catalysis, Membrane, Solar Energy, and Clean Combustion (http://chems.kaust.edu.sa).

The Chemical Science program is currently recruiting in the following areas:

Experimental Polymer Physics: With emphasis on the dynamics and molecular rheology of polymeric systems including, but not limited to, branched polymers, copolymers, functionalized and responsive polymers, nano composites, melts and solutions.

Polymer Engineering/Processing: With emphasis on a) the design, characterization, properties and modification of polymeric materials, b) the compounding and processing of polymeric materials and c) the structure property relationships and applications.

Heterogeneous Catalysis: Candidates are expected to have a strong expertise on "catalysis by design" especially on multistep reactions, on the association of various types of catalytic concepts or tools e.g. -acid base, -oxidation, -cascade, -confinement effect, -green and sustainable chemistry – in situ, in operando spectroscopies.

Organometallic Catalysis for Polymer Synthesis: The main objectives of this position will be the development of "new concepts in polymerization catalysts towards major breakthroughs". An appointment in this area is needed to develop also a better knowledge of elementary steps of polymerization with transition, rare earth or non-transition elements. New polymeric materials with new catalysts and a sustainable approach are domains of strong appeal.

Analytical Chemistry NMR: Candidates should develop new NMR techniques and apply these either to the investigation of biomolecules such as proteins, nucleic acids or polymers or to explore novel materials using solid-state NMR. Structural characterization, dynamic processes and the evaluation of reaction dynamics as well as mechanisms or understanding of the complex interplay between solutes and solvents are examples of relevant research topics. The candidate should be able to contribute to cutting-edge science in a strongly interdisciplinary setting and demonstrate the ability to participate in collaborative research. KAUST has established outstanding NMR facilities with including a 950 MHz NMR and a DNP-NMR. A successful candidate will have full access to these facilities and expected to take an active role in their development.

Catalytic Reactions Engineering (Chemical and Biological Engineering Program): This position should be focusing on "reactor design" and establishment of a "scale up platform". It will complement the existing areas of expertise in Chemical Science Program and put a greater focus on bridging chemistry and chemical engineering: "from the bench to the processes". Strong experience with industrial partners is needed.

New Methods of Organic Synthetic Chemistry: This position should be focused on initiating an organic chemistry research program focusing on new methods of organic synthesis from different feed stocks e.g. petrochemicals and natural products.

Applicants should have a proven track record to establish a high impact research program and have a commitment to high quality teaching at the graduate level.

To learn more about the PSE Division and complete the online application form, visit **http://apptrkr.com/551929** . Application requirements include the following:

- Updated curriculum vitae with a full list of publications
- Statement of research
- Statement of teaching interests
- Contact details of at least four potential referees

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