

Postdoc Positions Available at KAUST -- Appointment Starting January 1, 2018

Job title: Postdoctoral Fellow

Appointment period: One year, renewable annually for a maximum appointment of three years.

Deadline: The positions will remain open until filled.

Employer: King Abdullah University of Science and Technology (KAUST)

Job description:

One postdoctoral fellow position is available in the Computational Transport Phenomena Laboratory (<https://ctpl.kaust.edu.sa/Pages/People.aspx>) at King Abdullah University of Science and Technology (KAUST). The Computational Transport Phenomena Laboratory is associated with both the Division of Mathematical and Computer Sciences and Engineering and the Division of Earth and Environmental Sciences and Engineering at KAUST. Candidates with experience in one or more of the following research areas are encouraged to apply:

- (1) Modeling and simulations (molecular dynamics, Monte Carlo, DFT etc.) of soft-matter, polymers, polyelectrolytes etc.
- (2) Computational thermodynamics of hydrocarbon and other reservoir fluids,
- (3) Large scale computing, high-performance computing and software design

Qualifications:

A successful candidate must have a Ph.D. in petroleum engineering, chemical engineering, mechanical engineering, applied mathematics, computational mathematics, computer science, physics, chemistry or a related discipline, with a proven capacity for world-class research that is reflected in a publication record. In particular, good technical writing skills in English are fundamental. Though research experience in one or more of the aforementioned areas of research is preferred, other related areas of research will also be considered. Programming experience in FORTRAN, C, or C++ on a UNIX platform is a must. Experience in Java, MATLAB and/or python, LAMMPS is a plus.

Position responsibilities:

The recruited postdoctoral fellows will conduct world-class research work and develop simulation software under the supervision of Dr. Shuyu Sun, and will be involved in the publication of research results including journal publications and conference presentations. Furthermore, the recruited postdoctoral fellows may be expected to assist in the supervision of graduate research assistants and to assist in writing external funding proposals.

Salary and benefits:

Remuneration will be highly competitive and commensurate with the applicant's qualifications and experience. A typical annual stipend ranges from \$50,000 U.S. dollars (for fresh Ph.D.) to \$90,000 U.S. dollars (for Ph.D. with rich research experience), with zero tax paid to the Kingdom of Saudi Arabia. Successful applicants will also receive attractive compensation and benefit packages provided by KAUST, including:

- (1) Fully-furnished housing free to the postdoctoral fellow (up to a 2 bed-roomed town house) or at a subsidized price (for larger housing),
- (2) Annual travel allowance (one round-trip airline ticket per year to visit home country for postdoctoral fellow and his/her spouse and children, residing permanently in the Kingdom of Saudi Arabia),
- (3) Free education at KAUST schools for the postdoctoral fellow's children (if there are any),
- (4) Subsidized medical and dental insurance,
- (5) Relocation allowances at the beginning of contract, and
- (6) One month per year of paid vacation leave.

KAUST will be responsible for actual recruiting decision, appointment offers and employment benefits.

Application procedure:

Interested applicants should e-mail Dr. Shuyu Sun (shuyu.sun@kaust.edu.sa) or Dr. Arun Nair (arun.narayanannair@kaust.edu.sa) the following application materials:

- (1) A cover letter,
- (2) A complete professional CV, including educational background, experience, and a list of publications,
- (3) Names, affiliation, telephone numbers, and e-mail addresses of at least two individuals who could provide letters of reference, if requested,
- (4) A brief statement of research interests/plans (no more than two pages).

About KAUST: (<http://www.kaust.edu.sa/>)

KAUST is a new international, graduate-level, research university dedicated to inspiring a new age of scientific achievement in the Kingdom, the region and beyond. As an independent, merit-based institution, KAUST enables top researchers from around the globe and across all cultures to work together to solve the most challenging scientific and technological problems. This beautiful environmentally friendly campus, located on the Red Sea, opened in September 2009. It is the vibrant home to an international community of students, faculty and staff, researchers, and families, situated in a unique Red Sea coastal location near the village of Thuwal, approximately 80 kilometers (50 miles) north of Jeddah – Saudi Arabia’s second largest city. The total area of the self-contained community spans more than 36 million square meters, including a unique coral reef ecosystem that the University will preserve as a marine sanctuary. <http://www.kaust.edu.sa/>

KAUST houses the Shaheen Supercomputer, a 16-rack IBM Blue Gene/P System, equipped with 4 gigabytes of memory per node and capable of 222 teraflops — or 222 trillion floating-point-operations — per second, making KAUST’s campus in Thuwal the site of one of the world’s fastest supercomputers. (www.kaust.edu.sa/research/labs/supercomputing.html). KAUST is connected directly into the worldwide research networks, running 10 Gbps directly to networks such as Internet2 & GEANT2.