

## Postdoctoral Position in Hydraulic Fracture Mechanics Available at Masdar Institute in Abu Dhabi

A Postdoctoral Research Fellow position in hydro-fracturing (fracking) is available immediately at Masdar Institute of Science and Technology in Abu Dhabi in United Arab Emirates. Masdar Institute is established in collaboration with Massachusetts Institute of Technology. The research project focuses on using advanced computational fracture and damage mechanics for simulating hydro-fracturing of rocks in hydrocarbon fields. The candidate is expected to have a PhD in the field of geomechanics, or civil engineering with solid knowledge of hydraulic fracture mechanics and excellent theoretical and numerical skills. Specifically, we are looking for candidates with experience and skills in numerical models for hydraulic fractures, numerical models for poro-thermo-mechanical effects, theoretical and computational aspects of fracture mechanics, and extended finite element method.

## **About Masdar Institute:**

Masdar Institute (<a href="www.masdar.ac.ae">www.masdar.ac.ae</a>) is the world's first graduate-level university dedicated to providing real-world solutions to issues of sustainability. The Institute's goal is to become a world-class research-driven graduate-level university, focusing on advanced energy and sustainable technologies. The Institute, which was created in collaboration with the Massachusetts Institute of Technology (MIT), integrates theory and practice to incubate a culture of innovation and entrepreneurship, working to develop the critical thinkers and leaders of tomorrow. Masdar Institute is situated in Masdar City (<a href="www.masdar.ae">www.masdar.ae</a>), an emerging global clean-technology cluster that aims to be one of the world's most sustainable urban developments, powered by renewable energy and providing students and researchers with a unique opportunity to live and learn in a true "living laboratory" environment.

## Package:

The position will offer a **very competitive** salary package (tax-free). The position will be for an initial duration of 12 months, extendable (up to 2 or 3 years) depending on funding and performance.

## **Application submittal information:**

Application materials should include:

- applicant name and contact information,
- a curriculum vitae, and
- e-mail and contact information for at least three references.

Application must be submitted electronically to Dr. Abu Al-Rub (<a href="mailto:rabualrub@masdar.ac.ae">rabualrub@masdar.ac.ae</a>) specifying in the e-mail subject "Postdoctoral-fracking". Review of applications will begin immediately and continue until the position is filled. The candidate is expected to start at the earliest possible date. While we thank all applicants for their interest, only those under consideration will be contacted for a follow-up interview.