





Two fully funded PhD opportunities in Earth Sciences at KAUST

We seek two highly motivated PhD students to join our research teams in <u>Computational Earthquake Seismology</u> (CES) and <u>Crustal Deformation and InSAR</u> (CDI) at King Abdullah University of Science and Technology (KAUST). The two PhD students will take part in an exciting international project that aims at characterizing the active tectonics along with the seismic and volcanic hazards in the Red Sea and western Saudi Arabia, with particular focus on the transform fault systems. The objectives of the projects will be achieved by means of an interdisciplinary approach consisting of research cruises, fieldwork, remote sensing, temporary deployment of an offshore/onshore seismic network, analogue modelling and analysis of existing geophysical data.

In particular, one student (S1) will focus on the structural and volcano-tectonic aspect of the project carrying out multibeam bathymetric surveys, fault mapping by using satellite images, structural fieldwork and analogue modelling of tectonic processes. The other student (S2) will investigate the seismicity and earth structure by acquiring and analysing new broadband seismic data. Seismicity will be also investigated by using data from the analogue experiments. Both students are expected to take part in the analysis of existing geophysical datasets (e.g., reflection seismology profiles, gravimetry) and to take initiative in the development of the project. Attendance of international conferences and research collaborations, including short visits, with researchers in Germany, Italy, and the UK will be part of the student experience.

Applicants should have an MSc degree in geophysics, geology, or related fields. A minimum GPA of 3.2 (or equivalent) is required, as well as fluency in English and availability to participate to fieldwork in challenging environments. Programming/numerical skills are desirable, especially for the S2 position; good interpersonal skills and the willingness to work in a multicultural team are expected. To increase the diversity within the research groups, women are particularly welcome to apply.

The CES and CDI research groups are parts of the <u>Earth Science & Engineering program</u> at <u>KAUST</u>, which is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities and opportunities to explore and grow academically. The university attracts top international scientists and students to conduct fundamental and goal-oriented research in a wide range of scientific fields and technological applications.

Interested applicants should contact either Dr. Daniele Trippanera (daniele.trippanera@kaust.edu.sa) for inquiries regarding the S1 position or Dr. Laura Parisi (laura.parisi@kaust.edu.sa) regarding the S2 position. Prof. Sigurjón Jónsson (sigurjon.jonsson@kaust.edu.sa) and Prof. Martin Mai (martin.mai@kaust.edu.sa) can also be contacted for general questions about the project and admission at KAUST. The formal application process is handled via an online-platform. Admitted students receive a stipend, free housing, and a free health care. The position will stay open until filled. The starting date is flexible, but expected by January 2020. Pre-doctoral internships are available for preliminary data processing.