

Two Postdoc positions in Sedimentary and Structural Geology at the University of Trieste (Italy)

The Department of Mathematics and Geosciences at the University of Trieste (Italy), in the frame of the "Progetto Dipartimento di Eccellenza" (Department of Excellence) funded by the Italian Ministry of Research, is hiring two postdocs to expand its competences in digital techniques applied to the 3D reconstruction and analysis of geological bodies, both in outcrop and in the subsurface.

A short description of the positions is provided at the bottom of this page.

The selected candidates will work in the group of Sedimentary and Structural Geology of the Department and will benefit of the hardware and software facilities that has been recently set up for the acquisition and analysis of large 3D digital geological data. An involvement in ongoing research projects is also expected.

Additional relevant information for applicants are the following:

Place of work: San Giovanni Campus, Trieste (Italy)

Form of employment: Fixed-term position for 1(+1) year

Starting date: Ideally, summer 2021, but can be negotiated.

Salary: 1442 euros/month, after taxes (health care insurance is included)

Deadline for applications: April 7th, 2021

Applications must be submitted online after registering on the PICA platform at the address:

<https://pica.cineca.it/units>

Important note: once you have registered, in the search string select University of Trieste and type the following code: **21ar261-2-Decc**

Select the post that appears and follow the online procedure. Note that there is a single post for both the positions. You will be requested to choose one of the two during the application steps.

Please do not hesitate to contact the following persons for any additional information or if guidance through the submission process is needed:

Prof. Gian Andrea Pini (gpini@units.it), Dr. Marco Franceschi (mfranceschi@units.it), Prof. Lorenzo Bonini (lbonini@units.it)

Virtual Outcrop Modeling for the study of the relationships between tectonics and sedimentation

This project focuses on the realization of Virtual Outcrop Models and on the development of methodologies for the semi-automatic and automatic data mining of related geological information with specific application to the study of the relationships between tectonics and sedimentation in clastic and carbonate depositional environments. The successful candidate will have access to the facilities hosted at the Dept. of Mathematics and Geosciences that include hardware (drones, virtual workstations based on vGPU architecture) and software for photogrammetric acquisition and geomodelling. The selected candidate is expected to actively contribute in strengthening the research activity carried out by the Dept. of Mathematics and Geosciences in the fields of geomodelling and quantitative geology.

Improving Kinematic models of fold-related faulting

This project focuses on the interpretation of seismic reflection datasets to extract data on the 3D geometry of the geological structures (faults, off-sets, fold geometry, etc.). These data will be used to test and validate existing kinematic models comparing new data extracted by natural cases with analog models ran in the SMOLAB laboratory (Analogue Modelling Laboratory).