



**POLITECNICO  
DI TORINO**

Dipartimento  
di Ingegneria Strutturale,  
Edile e Geotecnica

Politecnico di Torino

Department of Structural, Geotechnical and Building Engineering

Research Associate / Post Doc Position in Geomechanics

A fixed term position for 24 months

Applications are invited for a Research Associate to join a project focused on the mechanical behavior of reservoir sands and sandstones, with implications related to compaction and subsidence processes due to depletion of hydrocarbon reservoirs.

The successful applicant will be inserted in a team studying the effects of hydro-mechanical behavior related to reservoir compaction (including the impact of creep, changes of water and gas saturation and grain breakage). The project, funded by the industry, will rely on laboratory mechanical characterization of reservoir rocks, field data (hydrocarbon pressure histories and associated displacements within reservoirs) and histories of ground floor displacements. Within this broader frame, the research associate will specifically work on the identification and calibration of proper constitutive laws suitable for a reliable reproduction of the hydro-mechanical behavior of these materials under the main environmental changes occurring during hydrocarbon production.

Qualified individuals should have a PhD in Geotechnical Engineering or Geosciences and have specific competences of constitutive and numerical modelling of geomaterials. Experience in one or more of the following areas is desirable but not essential: coupled processes in geomaterials, petroleum related rock mechanics, sedimentary and/or structural geology and reservoir modelling.

Interested applicants should contact Dr. Guido Musso at [guido.musso@polito.it](mailto:guido.musso@polito.it) before November 15, 2014. Applications must include CV, names of 2 referees and a statement on research interests.

**Dipartimento di Ingegneria Strutturale, Edile e Geotecnica**

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