



PhD grant – Universitat de Barcelona / Institut de Recerca UB-Geomodels

Are you interested in doing a PhD on salt tectonics combining fieldwork and analogue modeling?

We are happy to offer an exciting 4 years PhD position (FPI grant) to join us as part of the UB-Geomodels Research Institute at the University of Barcelona in the context of the SABREM Research Project (**Structure and deformation of salt-bearing rifted margins**) (PID2020-117598GB-I00) funded by the Ministry of Science and Innovation of the Spanish Government. Project will start at the beginning 2022.



Base of the Agost Salt Sheet (Rowan et al. 2020)

If interested, please send your applications via email before 11th November 2021 (see details in the attached file). Hurry up! The deadline is close!!

Supervisors: Drs. Eduard Roca & Oriol Ferrer

PhD project title: Kinematics and mechanics of exposed salt sheets on a salt bearing rifted margin: the Elda-Monòver, Agost and Rambla del Soler salt sheets (eastern Betics, SE Iberian Peninsula)

Project outline: The project aims gaining understanding of the structural evolution of salt sheets developed in salt bearing rifted margins that later on have been involved in fold and thrust belts. We propose to study the structure of three well-exposed salt sheets made by Upper Triassic evaporites placed at the boundary of the Subbetic and Prebetic domains (eastern Betics orogen). These domains represent two differently paleogeographical and deformed areas of an older Mesozoic salt bearing passive margin, and are nowadays bounded by a major middle Miocene thrust that includes major salt sheets with roof fragments, and both pre- and synorogenic secondary minibasins. The PhD project focus on the structural characterization of all these elements in order to decipher the salt sheet evolution, but also to define the geometry, internal deformation at the base of the salt sheets, and tectonostratigraphic relationships with the underlying sediments (rubble zone).

The work methodology will be based on an interdisciplinary approach integrating different tools (i.e., structural, stratigraphic and paleomagnetic field studies) with different modelling methods (analogue). It is a project that will take advantage of previous projects of the UB-Geomodels Research Institute (http://www.ub.edu/geomodels/index.html) and will be supported by the collaboration of worldwide leading-edge researchers involved in the SABREM Project.

Application should be submitted to Eduard Roca and Oriol Ferrer (eduardroca@ub.edu // joferrer@ub.edu) including a motivation letter and a short CV with academic marks (MSc. and BSc.) and at least two references. Motivation letters will be also considered on the application.