



**INSU**  
Institut national des sciences de l'Univers

**CRPG**  
Centre de Recherches Pétrographiques et Géochimiques  
www.crbg.cnrs-nancy.fr  
UPR 2300

## Doctoral project 2013-2016

**Title: Controlling factors in the evolution of foreland fold and thrust belts and associated basins – a case study of the North Pyrenean system**



Research Laboratory : CRPG, University of Lorraine, Nancy, France

Supervision : M. Ford (Professor, CRPG, University of Lorraine) and R. Huismans (Professor, University of Bergen, Norway)

Funding : ANR PYRAMID : North PYRenees: Integrated Assessment of fluid Migration history, rift Inversion, the role of surface processes and Deformation in the evolution of an orogenic retrowedge and its foreland basin

Applications are invited for a doctoral position in the field of orogen geodynamics and modelling to start in September 2012 at the CRPG, University of Lorraine, France under the supervision of Professor M. Ford in collaboration with Professor R. Huismans (University of Bergen). The position is fully funded for three years by the Agence National de Recherche (ANR) PYRAMID project. The project will focus on foreland fold and thrust belts (FFTB) and associated sedimentary basins by integrating observational constraints from the Northern Pyrenees and its foreland basins with forward numerical modelling of these systems. The main aim will be to develop generic fundamental understanding of the factors controlling variation in structural style of the Pyrenean fold belt in particular, and fold and thrust belts in general. The principal tasks will be to (a) establish the structural style and deformation history of the N. Pyrenean fold and thrust belt and its foreland basin along selected cross sections constrained by detailed field and geophysical data; (b) constrain lateral variations in geometry, the role of salt tectonics, amount and timing of syn-tectonic erosion, wedge-top and foredeep deposition, and the presence and character of inherited crustal features; (c) use forward numerical modelling to understand the controls on structural style, the role of syn-tectonic surface processes and the role of inherited structures on FFTB development. Numerical modelling will be performed at the University of Bergen under the supervision of Professor R. Huismans.

Applicants should have a Masters degree (or equivalent) in geology and/or geophysics from a recognised university. A strong command of written and spoken English is essential and a good understanding of French is a strong advantage. Proven competence in field mapping and structural analysis is essential. Some experience in numerical modelling would be a plus.

Interested candidates should send their curriculum vitae, a covering letter outlining their experience, motivation and interests along with the names and addresses of two referees by June 28<sup>th</sup> 2013 to Prof. M. Ford ([m.ford@crpg.cnrs-nancy.fr](mailto:m.ford@crpg.cnrs-nancy.fr)).

Postal address: CRPG UMR 7358, 15 rue Notre Dame des Pauvres, 54500 Vandœuvre les Nancy - France