

## **1-PhD Scholarship in numerical modeling of the Iberian lithospheric structure and topographic evolution**

**Department of Structure & Dynamics of the Earth  
CSIC-Institute for Earth Sciences Jaume Almera**

**Within the Framework of the research project:**

### **Modeling the Topographic Evolution of Iberia**

**Official project title in spanish:**

### **Modelado numérico de la Evolución topográfica de Iberia CGL2014-59516-P**

A geoscience project has been funded by the Spanish Ministry of Economy and Competitiveness. The project includes 1 PhD scholarship focusing on the development or application of state-of-the-art computer tools to investigate the origin the Iberian topographic evolution.

Despite recent studies have provided a large volume of new data, the classical key questions on the timing and processes involved in building the large-scale Cenozoic evolution of the topography of Iberia remain open: What is the origin of the high mean elevation of the Iberian Peninsula? What are the relative contributions to topography induced by sublithospheric forces, by the peculiar microplate tectonics and by the drainage evolution? Was this topography created before or after the formation of large planation surfaces in many regions of Iberia?

This PhD project will address these questions by using and further developing: 1) numerical modeling of the present day 3D lithospheric structure of Iberia; 2) numerical modeling of topographic evolution combining tectonic and surface (erosion) processes; and 3) new data acquisition on erosion rates, quantifying Miocene/Quaternary river erosion rates by dating the exposure to cosmogenic rays.

We seek a PhD candidate with a strong geological, geophysical or engineering background, and with interest in geodynamics, tectonics, and computer modeling.

According to her/his skills, the candidate will focus on further model development or the application of existing software developed in our team.

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The call for candidates is currently open and **will close on June 29<sup>th</sup>**, 2015 at 15:00.

Further information, and documentation can be found in [this page](#):

<http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.dbc68b34d11ccb5d52ffeb801432ea0/?vgnextoid=fed2bf0be2c6d410VgnVCM1000001d04140aRCRD>

Specific Information on the procedure for application [here](#):

[http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.791459a43fdf738d70fd325001432ea0/?vgnextoid=fed2bf0be2c6d410VgnVCM1000001d04140aRCRD&vgnnextchannel=a365a2852aaa8210VgnVCM1000001d04140aRCRD&vgnnextfmt=formato2&id3=2e42e0096f2dd410VgnVCM1000001d04140a\\_\\_\\_\\_\\_](http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.791459a43fdf738d70fd325001432ea0/?vgnextoid=fed2bf0be2c6d410VgnVCM1000001d04140aRCRD&vgnnextchannel=a365a2852aaa8210VgnVCM1000001d04140aRCRD&vgnnextfmt=formato2&id3=2e42e0096f2dd410VgnVCM1000001d04140a_____)