Postdoctoral position in flow, and hydrodynamic transport in permeable media

Job description
The Spanish National Research Council (IDAEA-CSIC, Barcelona) invites applications for a postdoctoral position to study flow and hydrodynamic transport in permeable media. The position is part of the HydroPore project (Spanish Ministry of Science and Innovation, PID2019-106887GB-C31, https://hydropore.es).

The aim of HydroPore is to systematically quantify the mechanisms and laws that govern multiphase flow, mechanical deformation and hydrodynamic transport in heterogeneous permeable media, from the pore to the regional scales. To achieve this goal, the project uses a multidisciplinary integrated research strategy that combines a new theoretical upscaling framework with novel experimental protocols and cutting-edge numerical simulation techniques.

The tasks include the numerical simulation of flow and transport on the pore and Darcy scales, and the analysis of numerical and experimental data. Experience in high performance computing is welcome. The candidate will work in an interdisciplinary team and research project.

Qualifications
- A PhD degree in physical, geological, mathematical or engineering sciences.
- Knowledge and skills in quantitative research.
- Skills in programming, scientific software and HPC.
- Experience in theory driven research with a clear view for applications.
- Interest in collaborative multi-disciplinary research.
- The ability to communicate verbally and in written form in English.

Conditions of Employment
- Full time position
- Annual gross salary: 38.000 – 42.000 Euro, depending on research experience
- Temporary employment for the duration of 1 year.
- The preferred starting date is 1 August.

Application
If you meet our qualification criteria, you are requested to send the following documents:
- letter stating your motivation to apply and your key qualities relevant for this position.
- up-to-date curriculum vitae.
- contact information of two academic references.

Applications are reviewed continuously until the position is filled. CSIC is an equal opportunity employer and values diversity.

Contact
To submit your application and for more information please contact:

Marco Dentz, marco.dentz@csic.es