

Opening of a Junior Chair Position in the Geomechanics and Porous Media group (G2MP)

University	University Pau and Pays Adour (↗web-UPPA).
Program	E2S UPPA Opening of two Junior Chair Positions (↗web-Program)
Laboratory	Laboratory for the thermodynamics of complex fluids and geological reservoirs UMR5150 UPPA/CNRS/TOTAL (↗web-LFCR).
Research team	Geomechanics and Porous Media (↗web-G2MP).

Context

The Energy and Environment Solutions initiative (E2S-UPPA) is a substantial, multi-year growth plan (<https://e2s-uppa.fr/>). Problem-oriented, inter-disciplinary and transverse research in Energy and Environment, is pursued while putting the emphasis on either industry relevance or high visibility in leading academic journals. Interests span over all areas of Energy and Environment, including but not limited to optimization of geo-resources exploration and exploitation, optimization of energy storage, materials for renewable energy, composites for structural lightening, analytical and microbial environmental analysis for diagnostic and remediation, as well as evaluation of organisms adaptation to environmental stresses in evolving or controlled ecosystems, and social issues about energy and environment.

Laboratory and research group description

LFCR is a research unit associated to UPPA, CNRS and the petroleum group TOTAL (UMR5150).

The research activity is decomposed into four research teams:

- Characterisation of geological reservoirs
- **Geomechanics and porous media (G2MP)**
- Interfaces et disperse systems
- Thermo-physical properties

At LFCR, the G2MP research team localised on the French Basque Coast at Anglet focuses on the mechanical behaviour of porous media, on the properties of confined fluids, on the fluid-solid couplings and on the transport properties in porous media.

The G2MP develops experimental activities such as modelling ones based on numerical tools at different scales.

This research team is highly multidisciplinary and gathers specialist in mechanics, physics or civil engineering focussing on the same scientific object: the porous media.

The current activities principally concern:

- Fluid behaviour in microporous media;
- Poromechanics of micro/meso porous media. Nano to continuum upscaling;
- Links and coupling between fracture, cracking, transport and fluid reactivity.

Aim

We seek outstanding candidates excited by the opportunity to shape the future solutions for energy and environment with a clear passion to make a difference for the future. Higher priority will be given to the overall originality and promise of the candidate's work.

Equal interest will be devoted to both fundamental topics and those supported by industrial partners. The junior chair will be devoted to enhance research and teaching in the fields of Energy and Environment and to establish and animate new international relations and partnerships. The candidate will be expected to teach in English at the graduate and undergraduate levels, to develop advanced graduate courses in a research specialty, as well as to develop a world-class research program with emphasis on Energy and Environment.

E2S-UPPA is committed to building a diverse educational environment in agreement with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. E2S-UPPA is also committed to further the compatibility of work and family lives. E2S-UPPA will provide support through its Welcome Center and facilitate career management.

Procedure

Required Competences:

- Applicants are expected to show outstanding commitment to research and teaching
- A maximum of 5 years' experience after PhD defense is desirable
- Applicants would be supported by the G2MP research group and should contact the group leader before application at david.gregoire[at]univ-pau.fr .
- Applicants who graduated from UPPA should attest of at least two years of research experience away from the consortium.

Timeline:

The chair will be funded for 5 years, starting from September 2018 at the earliest with a monthly salary before taxes in accordance with that of an assistant professor (national grid). The start-up package to support this junior chair consists in two PhD candidates (or one PhD candidate and one postdoctoral fellow) and associated running costs. Teaching would be limited to a half of regular academic duty.

Criteria of selection of the candidate (without priority order):

- The research and teaching projects
- The candidate's motivation
- The candidate's concern for the societal problematic related to energy and environment and his/her positioning to direct efforts toward the identification of original solutions for the future of energy and environment
- Outstanding scientific record (publications, patents, ...)

Tentative schedule:

Applications must be submitted via email at the following address: junior.chairs@e2s-uppa.eu before 2018, April, 2 (midnight, Paris time).

Required application documents (single pdf file):

- a cover letter
- a curriculum vitae
- three to five references (name and contact email)
- a statement of the director of the laboratory on the adequacy of the proposed research activities with those conducted in the host institute
- statements of research (5 pages) and teaching interests (1 page)
- two representative publications

Preselected candidates will be invited for an oral interview by the selection committee