



## **Professor position in Petroleum Engineering**

The Université de Pau et des Pays de l'Adour (UPPA), with the support of his partner TOTAL SA, is opening a professor position in the field of Petroleum Engineering and X-Ray tomography to be filled possibly by the end of 2013.

Located in Pau, at the faculty of sciences, the professor will join the physics department. Research will be hosted by the Laboratoire des Fluides Complexes et leurs Réservoirs (LFC-R, UMR 5150, UPPA – CNRS - Total).

LFC-R is a medium size laboratory specialised in the thermodynamics of complex fluids related to the production of oil and gas. The laboratory has developed a state-of-the-art knowledge on the characterisation of petroleum-like fluids under high temperature and high pressure conditions and oil and gas production related problems, including carbon dioxide storage issues. The laboratory hosts also a geomechanics group focused on fracture properties of (micro) porous media and fluid-solid interactions, and a group specialised in geological reservoirs. LFC-R is part of the federation of laboratory on Petroleum Engineering (IPRA) gathering over 100 scientists at UPPA and is also a member of the Institut Carnot ISIFoR which belongs to the top-ten research centers in Petroleum Engineering in Europe.

With his industrial partner TOTAL Exploration & Production, LFC-R is establishing a cutting edge technological platform dealing with the implementation of X-Ray microtomography in petroleum engineering. It consists in one microCT and two high resolution 3D X-Ray microscopes dedicated to multiphase flow properties in porous media under reservoir conditions, fracture of porous materials and microstructural analysis. The technological platform will span over LFC-R and the corporate research center of Total E&P in Pau in order to develop synergies. At LFC-R, it will comprise 3 research engineers and 3 faculty members.

This new professor position is part of the development of this large research project. The person to be recruited is expected to be the scientific supervisor of this project. He/She will benefit for this purpose of a chair sponsored by Total with several Ph.D. fellowships. He will be involved in the undergraduate program delivered by this department.

Applicants are expected to develop research projects within the scientific program of LFC-R, with an emphasis on multiphase flow in (fractured) porous media. Other research directions might be considered depending on the expertise of the candidates. Interactions with undergraduate and graduate programs at UPPA in the same scientific field are emphasized. It is also expected that the professor be involved in the petroleum engineering Master program.

Excellence in research and teaching, and motivations for developing expertise related to the X-Ray platform – including possibly new developments in X-ray imaging, are the most important qualities thought for.

Contact UPPA: Gilles Pijaudier-Cabot, director of LFC-R, [Gilles.Pijaudier-Cabot@univ-pau.fr](mailto:Gilles.Pijaudier-Cabot@univ-pau.fr)