Open Position

The *Université Grenoble Alpes* (UGA) is recruiting an *Assistant Professor* in the field of *dispersed two-phase flows*.

Teaching activities: The associate professor will teach at the UFR PHITEM "Physique, Ingénierie, Terre, Environnement, Mécanique" (https://phitem.ujf-grenoble.fr) of the newborn Université Grenoble Alpes (http://www.univ-grenoble-alpes.fr). He/she will participate to various courses of the covering theoretical aspects as well as numerical and experimental ones, with a special focus on fluid mechanics, in the bachelor and master's degrees in mechanics. He/she will have to accomplish a part of his/her teaching duty on the UGA campus in Valence, at least for some years following his/her appointment. Involvement in the development of experimental activities proposed to students, either on dedicated training platforms or in research laboratories, will be appreciated. The ability to teach in English will also be a plus in view of the international opening of many tracks in the master of mechanics.
Contact person: **Henri PARIS,** henri.paris@g-scop.inpg.fr, +33 (0)4 56 52 89 31

Research activities on **"***Dispersed Two-Phase Flows: generation, transport, structuration, role of turbulence".* The investigation of dispersed two-phase flows, laden with fluid inclusions or particles, is an emblematic and founding activity of the EDT (Two-phase flows and turbulence) research team at LEGI (Laboratoire des Écoulements Géophysiques et Industriels, http://www.legi.grenoble-inp.fr). The scientific issues aim at a better understanding of fundamental physical mechanisms. Applied fields range from chemical engineering to propulsion and to environmental issues to name a few, all sectors for which the development of reliable and accurate predictive tools is a proven necessity. In this context, the assistant professor will develop experiments at the highest level among the following aspects:

- Generation of inclusions, interfacial instabilities (atomization, bubbling…),
- Inclusions dynamics, role of the surrounding turbulence and / or induced agitation,
- Collective effects, identification of meso-scale structures and of their dynamics,
- Dispersed phase with evolving characteristics (coalescence, break-up, mass transfer).

Skills on advanced measuring techniques and data processing (optical, acoustic, high speed X-ray tomography, management and processing massive data bases) in particular dedicated to extreme conditions (high concentrations, strong turbulence levels…) would constitute a real added value. The desired profile is primarily experimental, but the recruited candidate is also expected to propose possible relevant modeling pathways and to simulate new collaborations at the interface experiment/modeling/simulation with internal and external research teams. In the perspective of expanding the research topics of the EDT team, relevant openings of the main research axis, proposed at the initiative of the candidate, will be also appreciated.
Contact persons: **Nicolas MORDANT** (head of EDT research team), nicolas.mordant@ujf-grenoble.fr, +(33) (0)4 76 82 50 47 and **Alain Cartellier**, alain.cartellier@legi.grenoble-inp.fr +(33) (0)7 86 83 47 35

Euraxess research fields: Engineering, Physics

IMPORTANT NOTICE

There is no restriction concerning the nationality of applicants. However, candidates must have been qualified for the 2016 recruiting campaign (see conditions on the Galaxy interface of the at https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/cand_qualification.htm). The recruiting process is expected to take place in Spring 2016, with a job starting date in Sept. 2016. The potential applicants are invited to contact the abovementioned persons.