Postdoc position in Condensed Matter Modelling

Toulouse, France

Location: LAAS-CNRS, Toulouse, France
Duration: 24 months

We are seeking a strongly motivated post-doctoral researcher to take in charge DFT Modelling for depicting complex chemistries at metal oxide surfaces and their interfaces. Position is in Toulouse, under the supervision of A. Estève. The fellowship, funded by the IDEX – University of Toulouse should start in 2016, at the earliest convenience.

The post-doc researcher will be fully integrated within a highly multi-disciplinary project's team (chemists, physicists and technologists) working on the development of multifunctional & performance-tailored nanomaterials for energy.

The applicant will have a pivotal role in the project by bringing fundamental aspects of chemical processes at metal-oxide surfaces (mostly ZnO) and their interfaces with metal and organics. The applicant will work in close collaboration with experimentalists located in Toulouse (LCC, CIRIMAT, CEMES) and at the University of Texas at Dallas.

Among specific aspects of interest: reaction mechanisms, i.e. atomic or molecular (organic, bio, inorganic) interactions with surfaces, solvent issues, cooperative effects, role of defects are to be investigated in close relation with experimental developments.

Required Education and Experience - A recent PhD degree (within last three years) in Materials Science, noticeably Chemistry or related disciplines is required. We seek for a strongly motivated student with strong background in computational materials sciences, particularly in atomic scale modelling; skills in manipulating Density Functional Theory codes (both periodic or cluster packages) is mandatory. The applicant should send a detailed CV, including a list of publications and communications and a motivation letter to aesteve@laas.fr.