PhD Student position: Porous materials for energy related applications

The Laboratory for Molecular Simulations (LSMO) is looking to hire a PhD student (4 years duration; fully funded) and thus, motivated candidates with a strong interest in the discovery of new materials are encouraged to apply. **The project targets to develop:** i. new chemistries that lead to open framework materials and ii. protocols to investigate their potential for a plethora of applications such as gas storage and (photo)catalysis utilising high-throughput robotic synthesis methodologies. For this project, several state-of-the-art instruments such as a robotic platform from Chemspeed Technologies – see figure on the right, four X-ray diffractometers (D8 Discover equipped with a 2D stage for high-throughput characterisation), SEM and TEM, gravimetric and volumetric analysers, thermogravimetric analyser, IR, UV/vis, fluorescence spectrometers, 400 MHz NMR (liquid and solid state) and others are available for material synthesis and characterisation and are ideally suited for the successful development of the project at an internationally competitive rate. The research will be carried out at EPFL Valais Wallis located in Sion, Switzerland while some of the course work will be carried out on the main EPFL campus located in Lausanne. **The project is highly ambitious and would suit only to candidates who are willing to work hard and with strong motivation to generate high impact publications.** Experience in synthesis and standard solid-state characterisation such as X-ray diffraction, IR and TGA is desirable but not essential.

Candidates should have a Master degree in Chemistry, Materials Science, Chemical Engineering, or a related field. Proficiency in written and spoken English is required. Applicants whose first language is not English are encouraged to provide TOEFL, GRE, and/or other comparable test results as a measure of English proficiency.

Please send your Curriculum vitae (CV), academic transcripts, a two pages summary of your interests and the names of 2 references to Dr. Kyriakos C. Stylianou via email: kyriakos.stylianou@epfl.ch, by December 31st 2015. Starting date: within the first half of 2016.

These positions require acceptance in the EPFL Doctoral Program of Chemistry and Chemical Engineering, for which the candidates must file an application at [http://phd.epfl.ch/edch](http://phd.epfl.ch/edch) (next deadline: 15th of January 2016) or send an email to edch@epfl.ch for more information.