POST-DOCTORAL POSITION : INNOVATIVE EXPERIMENTAL APPROACH OF CHEMO-MECHANICAL COUPLINGS

This post-doctoral position is to be held at FEMTO-ST (<u>www.femto-st.fr</u>), within the Dpt. Of Applied Mechanics. FEMTO-ST is a joint research unit which is affiliated with the French National Centre of Scientific Research (CNRS), the University of Franche-Comté (UFC), the National School of Mechanical Engineering and Microtechnology (ENSMM), and the Belfort-Montbéliard University of Technology (UTBM).

FEMTO-ST was founded in January 2004 by merging different laboratories active in different fields of engineering science: mechanics, optics and telecommunications, electronics, time-frequency, energetics and fluidics. As of January 2020, FEMTO-ST has about 750 people in its staff.

Scientific context:

This part of the CAVHYTATION project is intended to provide new insights in chemo-mechanical couplings at the microscale, in order to assess the potentialities of innovative micromechanical sensors. Micromechanical structures have been realized and a dedicated surface chemistry is under validation in order to provide a representative model system. As a post-doc in the PMMCM group, you will be in charge of two innovative experiments intended to probe the fine-scale deformation of the structures when their surface undergoes a chemical modification. One of these experiments is to be conducted together with a group operating at SOLEIL. These fine-scale displacements are crucial to elucidate the role of the material in the chemo-mechanical transduction.

Required qualifications:

The applicant is expected to have significant background and extensive experience as experimentalist. Experience in multidisciplinary environments would be greatly appreciated. Excellent communication skills as well as a team-oriented attitude are requested.

Duration: 12 months, starting by the end of 2020.

Salary : about 2800 \in gross monthly salary.

Contact:

Further information may be obtained from Fabien Amiot (fabien.amiot@femto-st.fr).

Applicants should send :

- a CV including a list of publications ;
- an application letter ;
- a statement of research interests and plans ;
- maximum 3 letters of reference ;

to Fabien Amiot (fabien.amiot@femto-st.fr) before July 15. 2020.