

Post-doctoral position at Michelin Company & Laboratoire 3SR-Grenoble

Thermo-mechanical properties of composite rubber compounds

Description

Michelin is a worldwide leader company in manufacturing and developing tyres with a strategy largely based on innovative research and deep materials knowledge. Tyres are made of composite materials mostly constituted of polymers (natural rubber) and reinforcing material so that high physical performances can be achieved.

The objective of the project is to develop predictive models (theoretical and numerical) able to simulate thermal and mechanical properties of innovative composite rubber compounds. Validation of modeling will be made through several experimental measurements at 3SR laboratory and through high-resolution non-destructive materials characterization at European Synchrotron (ESRF).

Requirements

The successful candidate will be integrated in an existing team involving PhD students, professors and engineers. Knowledge and skills required are:

- A PhD in computational or experimental Mechanics/Physics, Mechanical Engineering or a related area
- Working experience with FEA codes
- Past experiences on 3D tomography experiments coupled with Digital Image Correlation analyses are strongly appreciated.
- Good analytical thinking & problem solving capabilities.
- Excellent communication and interpersonal skills.
- Ease for team work, as well as independently

The candidate will be hosted by the University Joseph Fourier, at the Laboratoire 3SR (Sols, Solides, Structures, Risques - UMR 5521), Grenoble, France, under the supervision of Professor Laurent ORGEAS. A part of the work will be also made at the Michelin Center of Technology of Clermont-Ferrand (France).

Details and contacts

The position is available as soon as possible from **December 2014 for a period of 18 months**. Salary will depend upon experience. Interested candidates should submit a CV, names and addresses of references to

Dr. Benjamin Levrard, Tel : (+33) (0)6 01 10 54 61, benjamin.levrard@fr.michelin.com

Dr. Laurent Orgéas, (+33) (0)4 76 82 70 73, laurent.orgéas@3sr-grenoble.fr
www.3sr-grenoble.fr/