



Post-doctoral fellowship

Mid to high frequency modelling for structural acoustics

The project *Up2HF* funded by “Institut Carnot Ingénierie@Lyon” is concerned with development of predictive methods for high frequency vibroacoustics of complex systems. Based on the observation that the main available theory, statistical energy analysis (SEA) encounters difficulties in theory and applications, LVA and LTDS respectively proposed two alternative theories, SmEdA and RADIOSITY, they develop for numerous years.

In the framework of this project, the objective of the post-doctoral position is to develop and to validate the theoretical basements for the building of hybrid SEA/SmEdA and SEA/RADIOSITY models. The research will be mainly theoretical and numerical.

The applicant must be trained and have a PhD in acoustic modelling or statistical physics and must have a substantial experience in programming in Fortran, C, Matlab or Python. The applicant must have published articles in English.

The work will be conducted by two teams in Lyon, France: The Laboratory of Vibrations and Acoustics (LVA) at INSA-Lyon and the Laboratory of Tribology and Dynamics of Systems (LTDS) at Ecole centrale de Lyon. Both teams are internationally recognized for their skills in high frequencies in vibroacoustics.

The applicant can contact us by email and should send us a CV, a short cover letter and the copy of a selection of articles (written by the applicant).

Location: Lyon, France

Net salary: ~2000€/month

Duration: 24 months

Beginning: From January 2020

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<http://lva.insa-lyon.fr/en/>

<http://ltds.ec-lyon.fr/spip/?lang=en>

<http://celya.universite-lyon.fr/>

<https://www.ingenierie-at-lyon.org/en/>