

Faculté des Sciences Appliquées LTAS- Computational & Multiscale Mechanics of Materials (CM3) Ludovic Noels L.Noels@ulg.ac.be

In the context of a MNT.ERA-NET European project, the Aerospace and Mechanical Engineering department is opening

A PhD position in 3-Scale modeling for robust-design of vibrating micro sensors

The project

This project aims at improving the efficiency of the manufacturing process of MEMS while decreasing the production cost by considering at the design stage the uncertainties in such a way that a range of the MEMS properties can be predicted for the manufactured products, which will be immune to factors that could adversely affect performance. This approach is called **robust design** and it is focused on achieving target reliability.

This position will focus on vibrating micro-sensors, with the **development of an original micro-meso-macro stochastic finite element method to guarantee the statistical range of quality factor** actually reached by the manufacturing process.

Partners

- Open-Engineering SA (Belgium)
- V2i SA (Belgium)
- Technical University of Cluj-Napoca (Romania)
- National Research Institute for Development and Research in Microtechnology from Bucharest (Romania)
- Politechnika Warszawska (Poland)

Position

- 2.5-year position of research engineering (could be continued further)
- The research will be part of a PhD program
- The research will be supervised at ULg by J.-C Golinval, L. Noels and L. Wu

Profile

The applicant

- Has a master degree in mechanical, aerospace or computational engineering
- Has interest in computational engineering and C++ coding
- Has interest in working in an international context

Contact

Send CV and references to L. Noels (L.Noels @ ulg.ac.be)