Lodz University of Technology
Division of Dynamics

Principal Investigator: prof. Przemyslaw Perlikowski

Project title: Tuned mass damper with inerter which enables changes of inertance

Institution: Lodz University of Technology, Faculty of Mechanical Engineering,
Lodz, Poland

Position: Research Assistant (Post-doc)

Website: http://www.perlikowski.kdm.p.lodz.pl/project.html

Description of project tasks:

- Analytical and numerical investigations of existing implementations of TMDs
- Bifurcation analysis of the influence of TMD with non-linear spring, non-linear damper and inerter on mitigation of vibrations.
- Investigation of coexisting solutions and existence of rare attractors in system with proposed TMDs.
- Design of the experimental rig and tests using shaker.

Requirements

- Education: PhD in mechanical/civil engineering, physics or related disciplines,
- Laboratory experience: dynamical measurements,
- Programming experience: C++, Matlab, Mathematica,
- Knowledge of path-following toolbox: Auto/MatCont/Coco
- Publications: at least one publication,
- Languages: good command of English.

Procedures for the recruitment

The recruitment procedure has a two-stage formula and it will consist of the following stages:

1st Stage – an assessment of written applications. Applicants should submit:

- A motivating cover letter stating the current/future interests,
- Full CV,

- A list of publications,
- Letter of recommendation.
- Confirmation of PhD degree

2nd Stage – a qualifying interview with selected candidates

Terms and Conditions

The contract of employment (full-time) for a period of 1 year (with a possible extension for 2 years.) Remuneration 4622 zł per month (gross).

Applications will be accepted until 14.10.2016 at the Secretariat of the Department of Dynamics at the Faculty of Mechanical Engineering Technical University of Lodz, address: Stefanowskiego 1/15, 90-924 Lodz, (A22 building, room 122) and the e-mail address: przemyslaw.perlikowski@p.lodz.pl