



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. Remuneration 4622 zł per month (gross).

Applications will be accepted until **18.10.2017** 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) or the e-mail address: przemyslaw.perlikowski@p.lodz.pl