



Lodz University of Technology

Department of Automation, Biomechanics and Mechatronics

POST-DOC JOB OFFER

Requirements:

1. Formal (according to the rules of the NCN OPUS9 project):

- Obtained a doctoral degree no earlier than 7 years before the year of employment in the project;
- Will not have other contract employment;
- Do not receive any other form of remuneration from Polish National Science Centre.

2. Following from project requirements:

- have a degree of doctor of technical sciences in the field of mechanics, biomechanics or related disciplines;
- proven scientific achievements and/or experience in the field of biomechanics and mechanical engineering;
- good knowledge of the English language (including technical terminology);
- knowledge of program MATLAB / Simulink or similar;
- knowledge of program Inventor or similar;
- additional advantage will be experience in the modeling of the human musculoskeletal system and/or rehabilitation and supportive equipment.

Job Description

The duties of the person employed for this position will consist of conducting tests of the entrusted by the Head of the Project and specified in the schedule of the project National Science Centre - OPUS 9: „Modeling, kinematic-dynamic analysis and simulation of an exoskeleton prototype for the rehabilitation of people with motor disabilities of the lower limbs” followed by documentation of their results in the form of publications in reputable scientific journals. They include

- design of the overall mechanical construction of an exoskeleton including control elements;
- development of the mechanisms simulating real kinematics of hip, knee and ankle joints;
- development of a concept of a drive system of an exoskeleton;
- formulation (i.e. choice of the method) and implementation of a concept of an exoskeleton control;
- biocompatibility testing of the physical exoskeleton model in normal gait conditions;
- analysis of the locomotive stability of a human equipped with an exoskeleton.

The primary criterion for evaluation of the tasks implementation will be the papers published in journals from the JCR list.

Expected is also close cooperation with other investigators, including the exchange of information, participation in the analysis, development and preparation of the presentation of research results.



Employment conditions:

Full-time contract employment
Expected monthly salary (with tax): 4 000-4 500 PLN
Duration of employment : 14 months
Expected date of employment: January 2018

Please note that starting date and duration of employment can be delayed in case of the need for nostrification procedures

Required documents:

- application for employment addressed to the Rector of the Technical University of Lodz;
- CV (no longer than 1 page A4);
- list of achievements and scientific achievements (containing, among other: publications in reputable publications/journals, awards resulting from academic research, scholarships, awards and research experience gained outside the home scientific unit in the country or abroad, workshops and scientific training, participation in research projects);
- diploma certifying possession of a doctoral degree;
- copies of work certificates;
- references from at least one independent researcher, along with his contact information.

Please include the statement: "I hereby consent to the processing of personal data for the needs of the recruitment process"

Applications can be send as an e-mail titled "OPUS" with attached PDF to address: K-16@adm.p.lodz.pl or in form of hardcopy to address:

Prof. Jan Awrejcewicz
Head of Department of Automation, Biomechanics and Mechatronics,
Lodz University of Technology
1/15 Stefanowskiego Str., 90-924 Lodz
POLAND

Deadline: October 31st, 2017

WARNING!

Applications recived after the deadline will not be considered.

Department reserves the right to contact only candidates selected for the second stage of qualification, without notice to the other participants.

