

Krakow, 14.12.2021

## **Job opening**

Department name: Department of Automation and Computer Science

Category: scholarship

Vacancies: 1

Duration: 01.01.2022 – 31.12.2024 (3 years)

Scientific discipline: automation, electronics and electrical engineering

### **1. Requirements:**

- Master's degree in Automation, Electronics and Electrical Engineering or Mechanical Engineering,
- Knowledge of finite element method and field computing engineering software (FEMM, Ansys Maxwell)
- Advanced knowledge of engineering software (MATLAB, Simulink) – data acquisition and mathematical modeling
- Prior research experience in the field of magnetorheological fluids,
- Experience in conducting rheological experiments,
- Working knowledge of modern data acquisition and measurement systems and experience data processing and analysis.

### **2. Tasks**

- Research work within the scope of the Project 2020/39/B/ST8/02916, title: "Rheology of magnetorheological fluids subjected to non-uniform magnetic fields – pinch mode"
- Conducting rheological experiments – flow of magnetorheological fluids in pinch mode, data processing
- Modelling the behavior of MR fluids in pinch mode

### **3. Required documents:**

- Motivation letter addressed to the Project Manager
- Detailed CV
- Photocopies of engineering diploma (evidence of obtaining Masters degree in Automation, Electronics and Electrical Engineering or Mechanical Engineering)
- English language certificate (foreign applicants: Polish language certificate)
- Personal survey
- Declaration of legal capacity and no criminal record (in accordance with Article 113 of the Act)
- Evidence of previous scientific works
- List of publications (optional)

#### **CONDITIONS OF EMPLOYMENT**

- Type: scholarship
- Start date: 07.01.2022
- Project duration: 3 years

Data added: 14.12.2021

Type of NCN call: OPUS 20 (LAP)

Deadline for submission offers: 21.12.2021

Deadline for the competition: 07.01.2022

Employment for the project will take place after conducting a competition procedure consisting in:

- analysis of complex documentation;
- conducting interviews

The required documents should be submitted in person to the Dean Office, Faculty of Electrical and Computer Engineering, Cracow University of Technology – 31-155 Kraków, Warszawska 24, room 203.

The candidates should mark the folder with the documents with the note: "Applies to the job opening – OPUS 20 (LAP)".

The Project Manager reserves the right to contact candidates whose applications have met the necessary requirements and have been rated the highest by the Competition Committee. Information on the results of the competition will be published on the WIEiK PK, BIP PK and NCN websites, respectively.

The submitted documents can be collected from the Office of the Dean of the Faculty of Electrical and Computer Engineering (WIEiK) after 12-18.01.2022 - Room 203.

Documents that are not collected within this period will be destroyed.