

Department of Geomechanics and Mining Research

Part Time PhD Position

OFFER DESCRIPTION

We are looking forward **PhD students** on a part time job interested in a wide range of topics among Rock Mechanics, Rock Engineering and Geotechnics. The position(s) is available from March 2024.

Research topic

The [Institute of Geonics of the Czech Academy of Sciences](#) in Ostrava, Czech Republic, conducts scientific research on the Earth's crust and its landscapes, contributes to the exploitation of research results and provides research infrastructure. The [Department of Geomechanics and Mining Research](#) has research activities in rock mechanics and rock engineering. In general, the Department is concerned with the acquisition, development and refinement of new knowledge about complex processes in rock mass. Such processes are mainly related to human impacts, whether as a result of mining, targeted geotechnical interventions (e.g. in the field of underground construction, waste disposal and other storage facilities), or even accompanying processes and characteristics of the THM (thermo-hydro-mechanical) type. Research activities in the field of geotechnical issues focus on the detection and analysis of the primary and induced distribution of rock mass stress fields in the vicinity of excavated underground structures during the construction process, and their use in terms of mechanical and functional stability during the life cycle of the work. Post-mining research activities are developing due to the cessation of underground coal mining. Activities in this field are focused on surface deformations and seismic activity during mine flooding, stability of underground spaces of old mines for future use.

Responsibilities

Your responsibilities will include:

- Carrying out research related to team activities and projects.
- Close collaboration with our partner organizations.
- Presenting project results at international conferences and in scientific journals.
- Activity in preparation new projects (national and international).

There are no teaching duties associated with the position. Nevertheless, the cooperation with surrounding universities is welcome.

Candidate profile

We are looking for candidates who:

- Hold a master degree (or equivalent) in Geotechnics or related fields. PhD students are preferred;
- Have very good skills in the field on numerical simulations (FLAC3D, Phase, Midas GTS NX).
- Have the ability to work in a research team supervised by a senior researcher;
- Possess good written/verbal knowledge of English;

We offer

- Participation in interdisciplinary research programs and in international collaborations;
- Friendly atmosphere at department research team;
- Opportunities for professional growth by contributing to the Department's research mentioned above;
- Social and health insurance, 5 sick days, annual leave according to the Czech legislation.

Application procedure

The applications are to be sent to podatelna@ugn.cas.cz and should contain:

- Academic curriculum vitae including list of publications;
- Motivation letter (up to two pages), stating personal goals and research interests and their relation to the research topics of department;
- A proof of the obtained degrees.
- Optionally, letters of recommendation, sent directly to podatelna@ugn.cas.cz.

For full consideration, complete applications must be received by **31st January 2024**, but applications will be accepted until the position is filled.

Evaluation procedure

After the application deadline, the evaluation committee will review the applications and invite shortlisted candidates to the interview stage, no later than **20th February 2024**.

For more information

- Please feel free to contact head of department Assoc. Prof. Petr Konicek, PhD at petr.konicek@ugn.cas.cz.