Dean of the Faculty of Mechatronics, Informatics and Interdisciplinary Studies of the Technical University of Liberec announces public competition for the following position:

POSTDOC RESEARCHER

PROJECT OP VVV – INTERNATIONAL MOBILITIES AT THE TUL II
REG. NO. CZ.02.2.69/0.0/0.0/18_053/0017628

Job description:

- Scientific and research activities: Research in numerical methods for mathematical models of flow, transport and mechanics in fractured porous media. A group of researchers at FM TUL continuously develops an in-house SW for numerical simulations of processes in porous media with discrete fractures, with applications e.g. in modelling underground repository of nuclear waste or deep geothermal systems. The aim is to extend the current model for nonlinear hydro-mechanical effects that play significant role in the vicinity of tunnels and wells in crystalline rocks. The candidate’s responsibility will be mainly the design and implementation of a suitable numerical method and publication of results.

Required competence and expertise:

- Advanced knowledge of numerical solution of partial differential equations, in particular the finite element method and/or discontinuous Galerkin method, and of nonsmooth optimization methods
- Basic knowledge of porous media flow, contact problems in mechanics, models involving discrete fracture networks
- Experience in programming parallel numerical codes in C++, eventually FEniCS/Python
- Excellent ability in writing scientific papers
- Extremely high standards in terms of quality of work, attention to detail and strong organization skills
- Ability to work in a team
- Independence and responsibility
- Advanced English language knowledge - minimum at level B1

Required education:

- Completed university studies – specialisation in computer science, engineering or mathematical modeling
- PhD. Degree or a foreign equivalent – max. 7 years after the completion of PhD. studies

Required criteria:

- The applicant must be a researcher from abroad, which means that in the last 3 years s/he has worked minimally 2 complete years outside of the Czech Republic as a researcher with a minimum working load 0.5, or was a student in a PhD. programme or its equivalent; Czech citizens are not excluded.
Employment relationship:

- Working load 100 %
- Work contract will be concluded for a fixed term of 6 months, or by agreement
- The researcher is obliged to actively participate in a conference, seminar or workshop organized by the Technical University of Liberec
- Place of mobility: Liberec, Czech Republic

Date of commencement of employment:

- January 2021, or by agreement

Salary:

- Wage rate C3 (R3) is based on TUL internal wage regulation
- minimum monthly wage rate, including the project bonus: CZK 70,000, the possibility of obtaining extraordinary bonuses in connection with the evaluation of the employee's performance

Working conditions and wage classification are governed by the Conditions of Employment, Internal Wage Regulation of the Technical University of Liberec, the Labour Code and the Regulations on Competitive Selection Procedures for Filling Academic Positions of the Technical University of Liberec and the conditions of project OP VVV – MEZINÁRODNÍ MOBILITY NA TUL II, REG. Č. CZ.02.2.69/0.0/0.0/18_053/0017628.

We offer:

- Interesting, varied and responsible work
- 6-week leave
- Flexible working hours
- University canteen
- Child care, babysitting
- Day care centre for toddlers
- Possibility of accommodation in university lodging facilities
- Language courses at the Internal Language School, training
- Free sports activities (e.g. tennis, sauna, gym) in the university facilities,
- Free swimming in the Liberec pool
- Special telephone tariffs

The following documents in Czech or English must be attached to the application for the competition:

a) Copy of the diploma proving the completion of the PhD. Studies (officially certified copy of a PhD. Diploma shall be provided in the event of starting the employment)
b) Structured CV following the Europass template
c) Motivation letter of maximum two A4 pages describing aims for the research and innovation stay at the Technical University of Liberec
d) Proof of publication activity – in the last 3 years minimally 2 publications. Required publications include professional contributions listed in the databases: Thomson Reuters Web of Science, Scopus
or ERIH PLUS, and simultaneously belong to the categories of "article", "book", "book chapter", "letter" and "review".

e) Certificate confirming the knowledge of either Czech or English – level B1 or higher

In the first round of the selection procedure, the appointed committee will evaluate the presented documents. Subsequently, the committee will evaluate the required criteria completion and the aims for the work stay as presented in the submitted documents. All applicants will be notified about the decision not later than 40 working days from the end of the selection process.

The result of the selection procedure is published on the official notice board of the Technical University of Liberec (http://www.tul.cz/uredni-deska/uredni-deska-tul/vyberova-rizeni-volna-mista). Unsuccessful applicants may, within 5 days of publication, appeal to the Dean of the Faculty of Mechatronics, Informatics and Interdisciplinary Studies and request a review of the results.

The application with the above mentioned documents is to be sent not later than 30/9/2020 by e-mail or regular mail to the address below:

Technical University of Liberec
Personnel Department
Studentská 1402/2
461 17 Liberec 1

Contact person: Ing. Alena Šírková, Personnel Department
e-mail: volnamista@tul.cz