PhD position at the Czech Technical University in Prague, Faculty of Civil Engineering

The Department of Architectural Engineering in the Faculty of Civil Engineering of the Czech Technical University and the H2020 RadoNORM research consortium are looking for a full time PhD candidate to conduct an interdisciplinary study related to: "Assessing the impact of various types of radon protective and remedial measures on the environment".

Background
The RadoNORM project, to which the PhD contributes, is an EU-funded international research project, with 56 partners from 22 European countries, aiming at increasing our knowledge on Radon and NORM (Naturally Occurring Radioactive Materials).
Radon in buildings is considered to be the most important indoor air pollutant, with harmful effects on the health of the general population. According to WHO, radon accumulating in buildings is the second biggest cause of lung cancer. Several types of radon preventive and remedial measures are available for decreasing radon concentration in buildings. When selecting an appropriate measure, the impact on the environment is currently not taken into account. Standard straightforward decision-aiding techniques, such as cost-benefit analysis and cost-effectiveness analysis, which are commonly applied, do not include aspects of sustainable development, i.e. limiting the exploitation of non-renewable resources, reducing CO$_2$ emissions, etc. Taking environmental considerations into account when selecting measures is a challenge for the PhD project offered.

Research objectives
The project aims to study the impact of individual radon protective and remedial measures on the environment during the entire life cycle. The research will be based on the life cycle analysis of all the environmental inputs and outputs associated with the acquisition and operation of measures. Results of the impact assessment should provide novel insight into the design and selection of radon protective and remedial measures.
Characteristics of the position

- A full-time PhD position for a period of one year. Following a positive evaluation, the contract will be renewed for a further two-year period.
- The planned start date is January 1st 2021.
- Place of work is at the Department of Architectural Engineering of the Faculty of Civil Engineering in Prague.
- Gross monthly salary EUR 1120,-

Work requirements

The PhD candidate is expected to work actively on the preparation of a PhD thesis, which will be supervised by Dr. Antonín Lupišek and co-supervised by prof. Martin Jiránek from the Czech Technical University in Prague. It is further expected that you will regularly disseminate results of your research at scientific conferences, RadoNORM meetings and in scientific journal publications. You should actively report on your work progress.

Qualification requirements

- You hold a Master's degree in Architectural or Civil Engineering.
- You are familiar with the basics and principles of LCA.
- You have a good command of English.
- You are willing to work in an international and interdisciplinary team.
- You can work independently as well in a team.
- You are eager to learn about radon protective and remedial measures.

Application

Applications may only be submitted by email to: ludmila.kristanova@fsv.cvut.cz

Closing date is November 15st 2020.

Your application must be accompanied by the following documents:

- Motivation letter
- Academic CV including list of publications
- Copy of a Master's degree diploma
- Copy of certificates confirming your language skills
- Contact details of 2 referees
Selection process
The selection among the candidates will be based on documented knowledge in a relevant field of research, previous experience and grades, references, and the candidate's written motivation for seeking the position. Selected candidates might be contacted for online interviews (teleconference).

Further information
For administrative matters contact Ing. Ludmila Křišťanová, email: ludmila.kristanova@fsv.cvut.cz
For scientific matters contact Dr. Antonín Lupíšek, antonin.lupisek@cvut.cz