



## Director

# of IT4Innovations National Supercomputing Center

VSB – Technical University of Ostrava announces a selection procedure for a post of

## Researcher

# **Modelling for Nanotechnologies Lab**

(the position is suitable for both women and men)

# for project REFRESH - Research Excellence For REgion Sustainability and Hightech Industries (CZ.10.03.01/00/22\_003/0000048), research program 1 – Computational Design for New Generation of Materials Researcher MEL (D)

IT4Innovations National Supercomputing Center is a leading research, development, and innovation centre active in the fields of High-Performance Computing (HPC), Data Analytics (HPDA), Artificial Intelligence (AI), and Quantum Computing (QC) and their applications. We have strong international links and employ more than 180 scientific, technical, and administrative staff. At present, IT4Innovations is running two supercomputers: Karolina (15.7 PFlop/s, installed in the summer of 2021), Barbora (849 TFlop/s, installed in the autumn of 2019), and is a member of the consortium operating LUMI, one of Europe's most powerful supercomputers. IT4Innovations also operates the first Czech quantum computer named VLQ. For more details, see <a href="https://www.it4i.eu">www.it4i.eu</a>.

### **Activity description:**

- AI/ML-based modelling of single-atom catalytic systems based on metal doped 2D materials,
- publication activities of research outcomes,
- independent research and supervision of junior researchers,
- collaboration with our international partners (including exchange internships),
- participation in the preparation of (inter)national project proposals.

Full time equivalent:full-time employment, 100%Type of job contract:fixed-term employment, 2 years

**Expected start of employment:** 1. 10. 2025 or as agreed

#### We require:

- Ph.D. in (Physical or Materials) Chemistry, (Solid state) Physics or related disciplines,
- expertize in AI/ML-based modelling of chemical catalysis,
- knowledge of computational chemistry,
- user knowledge of Linux operating systems, HPC and queueing systems,
- 100 citations at least (H-index 7 at least),
- 3 months' foreign experience at least,
- experience of working abroad or with international research teams and basic/applied/contract research projects,
- active knowledge of the English language.

### We offer:

- position at a cutting-edge center for HPC&QC,
- competitive salary according to project conditions and candidate's qualification,
- modern facilities,
- opportunity to join an internationally recognized research team,
- possibility of further education,
- 6 weeks of holidays,
- flexible working hours,
- university kindergarten,
- contribution option to pension plan,
- company catering in the canteen,
- MultiSport card,
- other employee benefits according to the employer's offer.

Your personal data will be processed to the extent necessary for the implementation of the selection procedure in accordance with EU Regulation 2016/679.

https://www.vsb.cz/export/sites/vsb/en/.content/files/Informace-pro-uchazece-o-zamestnani-AJ.pdf

The application form substantiated with a letter of motivation and CV should be sent electronically to the email address: petra.brozova@vsb.cz until August 31, 2025.

In the subject of the email, please state "Open Call for the position of the Researcher for NANO lab".



Ministry of the Environment of the Czech Republic