

Director
of IT4Innovations National Supercomputing Center
VSB – Technical University of Ostrava
announces a selection procedure for the post of
**Postdoc – Computational Magnetism
Modelling for Nanotechnologies Lab**

The position is suitable for both women and men.

A 2 year Post-doc position (with possibility to be prolonged) at the IT4Innovations, at the Material Design group of Dr. Dominik Legut within the Modeling of Nanotechnology Lab, is open to applicants for studying MATERIAL PROPERTIES OF MAGNETIC MATERIALS by means of the spin-lattice model, where new models will be developed and verified in a close collaboration with experimental and theoretical colleagues from Czech Republic, and abroad (EU, USA) in accordance to the grant No. 24-11388I - Magneto-elasticity of non-cubic materials in spin-lattice dynamic simulations.

Activity description:

- conduct scientific investigations in two primary research directions:
 - development of spin–lattice models tailored to specific classes of magnetic materials,
 - validation of the developed models using representative systems through atomistic simulations and spin-dynamics calculations.
- apply numerical and theoretical methods to explore magnetic behavior at the atomistic level,
- refine the project’s research objectives based on emerging findings,
- independently propose and pursue original research ideas, with substantial freedom to shape the scientific focus of the project.

Full time equivalent:	full-time employment
Type of job contract:	fixed-term employment
Expected start of employment:	1. 5. 2026 or as agreed

We require:

- Ph.D. (completed or near completion) in physics, materials science, or related field,
- excellent written and spoken English,
- experience working in Linux environments,
- data manipulation and scripting (Python, Perl, etc.),
- programming skills (Fortran, C, C++),
- experience with DFT calculations and classical molecular dynamics.

We offer:

- work in a promising organization,
- salary evaluation according project conditions and candidate's experience,
- modern laboratory and classroom facilities,
- opportunity to participate in excellent 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 19. 4. 2026.**

In the subject of the email, please state “Open Call for the position of the Postdoc - Computational Magnetism for NANO”.