VSB TECHNICAL UNIVERSITY OF OSTRAVA | CENTRE FOR ENERGY AND ENVIRONMENTAL TECHNOLOGIES | INSTITUTE OF ENVIRONMENTAL TECHNOLOGY

E-BEAM Electron Beam Emergent Additive Manufacturing

HR EXCELLENCE IN RESEARCH

Director
of **Nanotechnology Centre**
VSB - Technical University of Ostrava
announces a selection procedure for a post of
RESEARCH FELLOW - ASSOCIATE PROFESSOR
in Electron Beam Surface Science and Nanomaterials Engineering
for EBEAM Centre

The position is suitable for both women and men.

Join a Research Team in Precision Electron Beam Manufacturing

Position Overview:
This position centers on research using Scanning Electron Microscopy (SEM) and Auger Spectroscopy to investigate and fabricate 2D and thin-film nanomaterials with atomic precision. The ideal candidate will integrate these methods with gas injection systems and thermal stimulation for advanced materials design in ultra-high vacuum (UHV) conditions. For more details, see https://ebeam.vsb.cz.

Key Responsibilities:
- SEM-Driven Synthesis: Lead development of electron beam-assisted synthesis techniques for novel nanomaterials and heterostructures.
- Surface Science Leadership: Employ AES, SEM, and other spectroscopic methods to study material interfaces and nanoscale interactions.
- Interdisciplinary Research: Collaborate with physicists, materials scientists, and engineers on projects at the frontier of nanomanufacturing.
- Mentoring: Supervise and guide PhD students and postdocs in precision material synthesis and characterization.

Full time equivalent:	Full-time/part-time
Type of job contrcact:	Fixed-term (with potential extension)
Expected start of employment:	Negotiable from Sept 1, 2025
Location:	Ostrava, Czech Republic
Number of Positions:	1,00

Essential Qualifications:
- Ph.D. in Physics, Physical Chemistry, or Materials Science.
- Must currently hold an Associate Professor (or equivalent) title as defined by national academic standards.
- Extensive hands-on experience in SEM and AES, especially in UHV environments.
- Documented track record in nanomaterials synthesis, surface analysis, and thin film engineering.
- Strong leadership in academic publishing, collaborative research, and mentoring.

Why Join the EBEAM Centre?
- World-Class Equipment: Access SEM systems with integrated gas injection, UHV platforms, and advanced characterization tools.
- Innovation-Driven Team: Collaborate with global leaders in electron beam science and 2D material engineering.
- Inclusive Environment: Work in a diverse, interdisciplinary, and respectful team culture.
- Research Impact: Contribute to technologies for nanoelectronics, energy systems, and future manufacturing.

We offer:

- work in a promising organization
- salary evaluation according to the candidate's experience
- state-of-the-art laboratories and computing resources
- opportunity to participate in excellent research
- possibility of further education
- 6 weeks of holidays
- flexible working hours
- university kindergarten
- contribution to pension plan
- company catering in the canteen
- MultiSport card
- other employee benefits according to the employer's offer

The EBEAM Centre values diversity and inclusion. We welcome applicants of all backgrounds and are committed to providing a supportive and collaborative workplace. Working language: English.

Send your CV and a cover letter to:

Prof. Mark H. Rümmeli – mhr1@vsb.cz

Vaclav Baron – vaclav.baron@vsb.cz

Please apply before 31. 8. 2025

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

Candidate selection will be based on research credentials, hands-on expertise, scientific vision, and alignment with the EBEAM Centre's strategic mission.

This position is funded by the European Union's Horizon Europe research and innovation programme under grant agreement No. 101087143.

Funded by
the European Union

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