

INSTITUTION: **The National Centre for Nuclear Research**



CITY: Otwock / Świerk

POSITION: **PhD student – scholarship (experimental physics – applications to metallic glasses)** at MAB NOMATEN

DISCIPLINE: material engineering, physics

POSTED: 13|05|2024

EXPIRES: 04|06|2024

WEBSITE: <https://nomaten.ncbj.gov.pl/phd-student-scholarship>

KEY WORDS: material engineering, condensed matter physics, machine learning

The National Centre for Nuclear Research (NCBJ) is inviting applications for a position

**PhD student – scholarship (experimental physics – applications to metallic glasses)  
at MAB NOMATEN**

**Localization:** Otwock / Świerk (Company transport from Warsaw, Otwock, Garwolin to Świerk and backwards).

NOMATEN Centre of Excellence is formed through a partnership between NCBJ (Poland), CEA (France) and VTT (Finland). NOMATEN focuses research on the characterization, analysis and development of advanced multifunctional materials, specifically those designed to work in extreme conditions, with primary examples being radiation, high temperature and corrosion.

More about NOMATEN CoE and the detailed project descriptions at <http://nomaten.ncbj.gov.pl>

**Job/tasks description:**

- Conducting research – testing predictions by making glasses and comparing with modelling. The experiments involve magnetron sputtering, and suction casting for sample preparation, and characterization with TEM, DSC, and nanoindentation.
- Interacting with the team working on metallic glasses including theorists.

The appointments are expected to commence in October 2024.

**Requirements:**

- Master of Science or equivalent (by the time appointments starts)

Preferred background: physics or materials science. Experience in amorphous materials and relevant techniques (experiment, modelling) is an advantage.

- fluency in English, spoken and written;

Our ambition is to build a team composed of world-leading researchers and young, highly motivated people who are passionate about multifunctional materials science.

**We offer:**

- 36 months scholarship on the project "Impact of Composition and Cooling Rate on Mechanical Properties of High Entropy Metallic Glasses" funded by the National Science Centre, Poland (SONATA BIS 13)
- Collaboration in international networks with research institutes and industrial companies.
- Access to the research potential of NOMATEN's three partners between NCBJ (Poland), CEA (France) and VTT (Finland).
- Travel funds for participation in conferences and collaboration, attractive working conditions, atmosphere of teamwork, family-friendly environment with flexible working hours. support of an experienced local team in legal, financial and organisational issues as well as logistic support and advice related to working in Poland - enabling smooth relocation and equal opportunities.

**Documents required:**

- Cover letter that explains the motivating factors for scholarship (max. 1 pp)
- CV with complete publication list
- A list of 2 reference persons including their positions and contact details (e-mail address).
- A copy of the diploma (or other document) confirming obtaining MSc
- As an attachment to your application please sign and enclose the following declaration: *I agree to the processing of my personal data included in this application for the needs necessary to carry out the recruitment.*

**Contact:** dr Mikko Alava ([mikko.alava@ncbj.gov.pl](mailto:mikko.alava@ncbj.gov.pl)), Ass. Prof. Silvia Bonfanti ([silvia.bonfanti@ncbj.gov.pl](mailto:silvia.bonfanti@ncbj.gov.pl)) – project PI

Applications in electronic form should be submitted by June 4th, 2024 in English to: [magdalena.jedrkwicz@ncbj.gov.pl](mailto:magdalena.jedrkwicz@ncbj.gov.pl) (HR manager)

Preselected candidates will be invited to an interview and an oral exam in physics at the college level in the Graduate School of Physics and Chemistry at the NCBJ. Only those who pass the exam will be taken into account in the final selection.

The recruitment process will finish by June 30th 2024.

Candidates may be asked to provide additional documents. We reserve the right to contact only selected candidates and the right to inform about the decision to fill the post only to the selected candidate.

Candidates may be asked to provide additional documents. In the selection process, short-listed candidates will be interviewed in person or remotely.

#### INFORMATION CLAUSE ON PERSONAL DATA PROCESSING:

1. The controllers of the personal data processed during the recruitment process are:
  - 1) National Centre for Nuclear Research, ul. Andrzeja Sołtana 7, 05-400 Otwock and
  - 2) Foundation for Polish Science, ul. I. Krasickiego 20/22, 02-611 Warszawa.
2. The data protection officer can be contacted by using the following address:
  - 1) Personal Data Protection Officer, National Centre for Nuclear Research, Sołtana 7, 05-400 Otwock, Poland
  - 2) [iod@ncbj.gov.pl](mailto:iod@ncbj.gov.pl)
3. Providing data contained in recruitment documents is a condition for applying for a job at NCBJ.
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5. Your personal data will not be made available to other data recipients.
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7. No automated individual decision-making and profiling as referred in Article 22 (1) and (4) GDPR is done during recruitment conducted by NCBJ. This means that no decisions regarding job candidates are made automatically and that no job candidate profiles are made.
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The National Centre for Nuclear Research is awarded by [HR Excellence in Research](#)". Recruitment in NOMATEN is based on OTM-R system (Open, Transparent and Merit-based recruitment practices in Research Performing Organisations).



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