

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



CITY: Otwock / Świerk

POSITION: **Student scholarships** at NOMATEN CoE

DISCIPLINE: Materials Engineering

POSTED: 13|01|2025

EXPIRES: 04|02|2025

WEBSITE: <https://www.ncbj.gov.pl/en/praca/student-scholarships-mab-nomaten>

KEY WORDS: Materials Engineering, SEM, TEM, Scholarship

The National Centre for Nuclear Research (NCBJ) invites applications for SONATA “Concentrated solid solution alloys (CSAs) - a new insight into the development of radiation-resistant alloys for nuclear fusion applications” funded by the National Science Centre, Poland, (project number: 2023/51/D/ST11/00288, Principal Investigator: Dr. Eng. Damian Kalita).

The project is being carried out within the NOMATEN Centre of Excellence (<https://nomaten.ncbj.gov.pl/>).

Location: Otwock - Świerk - in the outskirts of Warsaw with daily transport services provided.

Description of tasks:

- Manufacturing and preparing materials for research – arc melting, cutting, polishing
- Basic characterization of materials using techniques such as optical microscopy, scanning electron microscopy (SEM), transmission electron microscopy (TEM)
- Preparation of samples for TEM observation using focused ion beam (FIB) and electrochemical etching techniques
- Preparing reports, scientific publications, and conference presentations
- Collaboration with other members of the CoE

Requirements:

- Student or doctoral candidate status in the field of materials engineering, mechanics, physics, or related fields

NCN scholarships may be awarded to individuals who are not PhD holders and meet any of the following terms:

- a) be students of full-time first or second-cycle degree programmes or uniform Master’s studies at any university in Poland;
- b) participate in a doctoral programme;

c) are PhD students at a doctoral school.

- Basic knowledge of electron microscopy techniques – SEM, TEM
- Knowledge of metallographic sample preparation techniques for microscopic observation (optical microscopy, SEM, TEM)
- Knowledge related to the manufacturing and heat treatment of metallic materials
- Experience in laboratory work
- Good English skills, enabling use of scientific literature
- Strong communication skills, systematic approach, good work organization, and ability to work in a team

Additional assets:

- Research experience confirmed by authorship/co-authorship of scientific publications, participation in conferences, and involvement in scientific clubs
- Knowledge related to the formation of radiation defects in metallic materials
- Experience in applying electron microscopy techniques (SEM, TEM) in materials engineering
- Experience in sample preparation using the FIB lift-out technique
- Experience in other research techniques, e.g., hardness testing, nanoindentation, tensile testing, XRD

We offer:

- A scholarship of 5000 PLN per month, paid for a period of 33 months
- The opportunity to pursue PhD studies at the NCBJ Doctoral School
- Collaboration within a network of international research institutions and commercial companies
- Opportunities for development through participation in training and international conferences
- Work at one of the largest research institutes in Poland

Required documents:

- CV
- List of scientific achievements (publications, conferences, internships, participation in training, etc.)
- Cover letter with a description of scientific interests (max. 1 A4 page)
- Copies of diplomas/certificates confirming qualifications

Contact: Dr. inż. Damian Kalita e-mail: Damian.Kalita@ncbj.gov.pl

Applications in electronic form should be submitted in English to: Damian.Kalita@ncbj.gov.pl

As an attachment to your application please sign & enclose the following declarations:

I agree for my personal data included in the application documents to be processed by National Centre for Nuclear Research with its registered office in Otwock, 7 Andrzej Sołtan Street, 05-420 Otwock, for a period of 12 months from their submission, in order to carry out future recruitment processes.

Others information:

We reserve the right to contact only selected candidates & the right to inform about the decision to fill the post only to the selected candidate.

At NCBJ there is the internal procedure for the report of breaches of law. Anyone interested in its content can access it at any time on the website:
<https://www.ncbj.gov.pl/sites/default/files/prasa/INTERNAL%20NOTIFICATION%20PROCEDURE.pdf>

Information in accordance with Article 13 RODO on the processing of personal data:

1. The Personal Data Controller of your personal data is the National Centre for Nuclear Research (hereinafter referred to as Controller or NCBJ) with its registered office in Otwock, 7 Andrzej Sołtan Street, 05-400 Otwock.
2. Your personal data will be processed for recruitment purposes on the basis of applicable law, including the Labour Code. Data not required by law, provided by you in your documents, will be processed on the basis of your consent. Your consent is given by the transfer of this data.
3. The full content of the information clause of Article 13 RODO is available at <https://www.ncbj.gov.pl/en/gdpr> A candidate should be a person:



HR EXCELLENCE IN RESEARCH

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).