

**Jobbnorge ID:** 263862  
**Deadline:** 7/26/2024  
**Website:** <http://www.uis.no/>  
**Scope:** Fulltime  
**Duration:** Engagement

## PhD Fellowship in Materials Physics

### Job description

The University of Stavanger invites applicants for a PhD Fellowship at the the Faculty of Science and Technology, Department of Mathematics and Physics.

The position is vacant from 1st of September 2024 with a start no later than 1st of February 2025.

This is a trainee position that will give promising researchers an opportunity for academic development through a PhD education leading to a doctoral degree.

The hired candidate will be admitted to the PhD program in Science and Technology. The education includes relevant courses amounting to about six months of study, a dissertation based on independent research, participation in national and international research environments, relevant academic communication, a trial lecture and public defence. Read more about the PhD education at UiS on [our website](#).

The appointment is for three years with research duties exclusively.

The position is funded by Research Council of Norway.

### Research topic

The PhD Fellow will be affiliated with the project “Neutron Scattering and Atomistic Simulations for a SUPERior Understanding of SUPERionic Conduction (SUPER2)” funded by the Norwegian Research Council. In this project, scientists at the University of Stavanger, the Science and Technology Facilities Council (STFC in the UK), the University College London (UCL in the UK) will work together to develop a new methodology to gain a deeper understanding of ionic diffusion in a broad range of advanced functional materials. This methodology relies on combining polarized quasielastic neutron scattering (pQENS), inelastic neutron scattering (INS), and molecular dynamics with machine-learned potentials to gain insights into ion conduction processes crucial to the performance of many existing and emerging green technologies, from batteries to fuel cells to thermoelectric generators. The PhD fellow is expected to characterize the physical properties of the selected materials, perform neutron scattering experiments at various large-scale facilities in Europe (including the ISIS Neutron and Muon Source, UK; Paul Scherrer Institut, Switzerland) and the rest of the world, and carry out ab initio and molecular dynamics simulations for comparison with experiment.

### Qualification requirements

We are looking for applicants with a strong academic background who have completed a five-year master degree within Physics, Chemistry, or Materials Science, preferably acquired recently; or who possess corresponding qualifications that could provide a basis for successfully completing a doctorate.

To be eligible for admission to the doctoral programmes at the University of Stavanger both the grade for your master’s thesis and the weighted average grade of your master’s degree must individually be equivalent to or better than a B grade. If you finish your education (masters degree) in the fall of 2024 you are also welcome to apply.

Applicants with an education from an institution with a different grade scale than A-F, and/or with other types of credits than sp/ECTS, must attach a confirmed conversion scale that shows how the grades can be compared with the Norwegian A-F scale and a Diploma Supplement or similar that explains the scope of the subjects that are included in the education. [You can use these conversion scales to calculate your points for admission.](#)

You must have:

- background in materials physics
- a good understanding of crystal structure and dynamics
- a good knowledge of modern materials characterization techniques
- experience with simulation of physical systems
- good programming skills in at least one programming language

Emphasis is also placed on your:

- good skills in particularly X-ray diffraction and spectroscopic techniques, ideally DFT and/or MD
- good programming skills in Python
- motivation and potential for research within the field
- your professional and personal skills for completing the doctoral degree within the timeframe

- ability to work independently and in a team, be innovative and creative
- ability to work structured and handle a heavy workload
- having a good command of both oral and written English

## Requirements for competence in English

A good proficiency in English is required for anyone attending the PhD program. International applicants must document this with a valid test certificate from one of the following tests:

- TOEFL - Test of English as a Foreign Language, Internet-Based Test (IBT). Minimum result: 90
- IELTS - International English Language Testing Service. Minimum result: 6.5
- Certificate in Advanced English (CAE) or Certificate of Proficiency in English (CPE) from the University of Cambridge
- PTE Academic - Pearson Test of English Academic. Minimum result: 62

The following applicants are exempt from the above requirements:

- Applicants with one year of completed university studies in Australia, Canada, Ireland, New Zealand, United Kingdom, USA
- Applicants with an International Baccalaureate (IB) diploma
- Applicants with a completed master's degrees taught in English in a EU/EEA country
- Applicants who are exempt based on HK-dir's [GSU list](#)

## We offer

- a PhD education in a large, exciting and societally important organisation
- an ambitious work community which is developing rapidly. We strive to include employees at all levels in strategic decisions and promote an informal atmosphere with a flat organisational structure.
- access to [Lifekeys](#), a digital service for the preservation of personal mental health and well-being
- salary in accordance with the State Salary Scale, l.pl 17.515, code 1017, NOK 532 200 gross per year with salary development according to seniority in the position. A higher salary may be considered in special cases. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.
- automatic membership in the [Norwegian Public Service Pension Fund](#), which provides favourable insurance- and retirement benefits
- favourable membership terms at a gym and at the [SIS sports club](#) at campus
- employment with an Inclusive Workplace organisation which is committed to reducing sick leave, increasing the proportion of employees with reduced working capacity, and increasing the number of professionally active seniors
- "[Hjem-jobb-hjem](#)" discounted public transport to and from work
- as an employee in Norway, you will have access to an optimal health service, as well as good pensions, generous maternity/paternity leave, and a competitive salary. Nursery places are guaranteed and reasonably priced
- relocation programme

## Diversity

Diversity is a resource in the working and learning environment at UiS. When we have different backgrounds and experiences, we can approach challenges from multiple perspectives and find better solutions.

At UiS, we are committed to showing respect for each other's differences and accommodating employees with disabilities. We take into consideration your needs and your situation in various life phases.

If you find this position interesting, we encourage you to apply, regardless of gender, disability, cultural background, or whether you have been out of the workforce for a period.

If there are qualified applicants with disabilities, gaps in their CV, or immigrant backgrounds, we will invite at least one applicant from each of these groups for an interview. If you fall into any of these categories, feel free to indicate it when applying for the position.

Learn more about the criteria for being considered an applicant in these specific groups [here](#).

The university aims to recruit more women within the subject area. If several applicants are considered to have equal qualifications, female applicants will be given priority.

## Contact information

More information on the position (and project description) can be obtained from Adjunct associate professor Gøran Nilsen, e-mail: [goran.nilsen@stfc.ac.uk](mailto:goran.nilsen@stfc.ac.uk) or Associate professor Diana Quintero Castro, e-mail: [diana.l.quintero@uis.no](mailto:diana.l.quintero@uis.no)

Information about the appointment procedure can be obtained from HR Advisor Salla O. Andersen, tel: +47 51 83 19 76, e-mail: [rekruttering@uis.no](mailto:rekruttering@uis.no)

## Application

To apply for this position please follow the link "Apply for this job". Your application letter, relevant education and work experience as well as language skills must be registered here. In your application letter, you must state your research interests and motivation for the position.

The following documents must be uploaded as attachments to your application:

- CV with a full summary of your education and experience
- references, certificates/diplomas and other documentation that you consider relevant
- Diploma Supplement or similar and a confirmed conversion scale if this is required
- documentation on competence in English if this is required

- publications or other relevant research work

Applications are evaluated based on the information available in Jobbnorge at the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above and that you have attached the necessary documentation.

The documentation must be available in either a Scandinavian language or in English. If the total size of the attachments exceeds 30 MB, they must be compressed before upload.

Please note that information on applicants may be published even if the applicant has requested not to be included in the official list of applicants - see [Section 25 of the Freedom of Information Act](#). If your request is not granted, you will be notified.

UiS only considers applications and attachments registered in Jobbnorge.

## General information

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. If your application is considered to be in conflict with the criteria in the latter legislation and if it is considered that you will not be able to start in the position within 01.12.2025, your application will be rejected without further assessment.

Employment as PhD Fellow is regulated in "[Regulations concerning terms and conditions of employment for the posts of post-doctoral research fellow and research fellow, research assistant and resident](#)".

Your qualifications for the position, based on documentation registered in Jobbnorge, will be assessed by an internal expert committee. Based on the committee's statement, relevant applicants will be invited to an interview before any recommendations are made. References will also be obtained for relevant candidates. [More about the hiring process on our website](#).

The appointee will be based at the University of Stavanger, with the exception of a stay abroad at a relevant centre of research.

It is a prerequisite that you have a residence which enables you to be present at/available to the academic community during ordinary working hours.

The position has been announced in both Norwegian and English. In the case of differences of meaning between the texts, the English text takes precedence.

## UiS - challenge the well-known and explore the unknown

The University of Stavanger (UiS) has about 12,000 students and 2,200 employees. The university has high ambitions. We strive to have an innovative and international profile, and be a driving force in knowledge development and in the process of societal change. Our common direction is driven by consideration for green and sustainable change and equitable social development, through new ways of managing natural resources and facilitating better cities and local communities. Energy, health and welfare, learning for life are our focus areas.

In constant collaboration and dialogue with our surroundings, regionally, nationally and internationally, we enjoy an open and creative climate for education, research, innovation, dissemination and museum activities. Academic life at the University of Stavanger is organised into six faculties comprising various departments/schools and National Research Centres, as well as the Museum of Archaeology. We are a member of the European Consortium of Innovative Universities. The university is located in the most attractive region in the country with more than 300,000 inhabitants. The Stavanger region has a dynamic labour market and exciting cultural and leisure activities.

Together with our staff and students we will challenge the well-known and explore the unknown.

**The Faculty of Science and Technology** offers study programs at bachelor, master and doctoral level. The faculty has established close cooperation on research with NORCE (Norwegian Research Centre AS) and the regional industry. A number of master's and doctoral theses are made in collaboration with the industry. The faculty has established research collaborations with universities in the US and Europe, and has developed academic environments that are at the forefront internationally. These include Petroleum and Offshore Technology as well as Risk Management and Societal Safety, which constitute two of the university's strategic focus areas. The faculty has about 2,800 students and approximately 500 employees at the Department of Electrical Engineering and Computer Science, Department of Structural Engineering and Materials Science, Department of Mathematics and Physics, Department of Energy and Petroleum Engineering, Department of Energy Resources and the Department of Safety, Economics and Planning

**Department of Mathematics and Physics** is part of the Faculty of Science and Technology. The department offers study programs at all levels within the areas Mathematics, Statistics and Physics. The department is responsible for all basic tuition in mathematics, physics and statistics at the faculty. There are currently 50 employees including doctoral and postdoctoral fellows, and 100 students at the department.

## Additional information

### Contact persons:

- Gøran Nilsen, Førsteamanuensis II  
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- Diana Lucia Quintero Castro, Førsteamanuensis  
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- Salla O. Andersen, HR-rådgiver  
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### Place of service:

Ullandhaug 4036 Stavanger (Stavanger Municipality)