

UiT The Arctic University of Norway Faculty of Science and Technology -Department of Chemistry

Faculty of Science and Technology

PhD Fellow in Theoretical Chemistry

The position

The Department of Chemistry has a PhD position available in theoretical chemistry, affiliated with the Hylleraas Centre for Quantum Molecular Sciences, a Norwegian Centre of Research Excellence, and the research group Theoretical and Computational Chemistry.

The workplace is at UiT in Tromsø. You must be able to start in the position in Tromsø within a reasonable time after receiving the offer.

The position is for a period of four years. The nominal length of the PhD programme is three years. The fourth year is distributed as 25 % each year and will consist of teaching and other duties. The objective of the position is to complete research training to the level of a doctoral degree. Admission to the PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position.

The position's field of research

The primary focus of work for the successful applicant(s) will be the development and implementation of quantum-chemical methods and/or the application of such methods to problems in biology, chemistry, or materials science. Possible topics include, but are not limited to:

- development of relativistic density-functional methods for molecules or solids
- the use of multiwavelets as basis functions for quantum-chemical calculations
- · development of multiscale methods
- · computational spectroscopy
- development of response theory methods for studies of molecular properties
- molecular properties in strong magnetic fields

The exact topic for a PhD thesis will be agreed upon in dialogue with the successful candidates and the interests of available supervisors in the research group <u>Theoretical and Computational Chemistry</u>.

Contact

For further information about the position, please contact:

- Professor Luca Frediani (+47 47 323 585 / luca.frediani@uit.no)
- Head of Administration Stig Eide (+47 776 23100 / stig.eide@uit.no)

Qualifications

This position requires a Norwegian Master's degree within computational chemistry, quantum chemistry, atomic or molecular physics, computational materials science, or simulation methods, or a corresponding foreign Master's degree recognized as equivalent to a Norwegian Master's degree within the same areas.

Depending on the main topic of work, one or more of the following skills are advantageous:

- experience with programming languages (Fortran, C, C++ and/or Python)
- · knowledge in modelling of chemical or biological systems or material science
- a strong background in mathematics or physics

Applicants must document fluency in English and be able to work in an international environment.

The application letter should state which topic(s) the applicant is interested in, with arguments for why their background is suitable. We are looking for a well motivated person, with a very good academic record and potential, with analytical and problem-solving skills. This must be clearly demonstrated in the application. Other qualifications which will be valued positively include:

- High quality in master thesis work and from grade transcripts
- Independence and self-motivation
- Creativity and ability to think outside the box
- · Exemplary work ethic and commitment to the job

· Ability to carry out collaborative work in a team

In the assessment, the emphasis is on the applicant's potential to complete a research education based on the master's thesis or equivalent, academic record and any other scientific work. In addition, other experience of significance for the completion of the doctoral programme may be given consideration.

We will also emphasize motivation and personal suitability for the position.

As many as possible should have the opportunity to undertake organized research training. If you already hold a PhD or have equivalent competence, we will not appoint you to this position.

Admission to the PhD programme

For employment in the PhD position, you must be qualified for admission to the PhD programme at the <u>Faculty of Science and Technology</u> and participate in organized doctoral studies within the employment period.

Admission normally requires:

- A bachelor's degree of 180 ECTS and a master's degree of 120 ECTS, or an integrated master's degree of 300 ECTS.
- A master's thesis with a scope corresponding to at least 30 ECTS for a master's degree of 120 ECTS.
- A master's thesis with a scope corresponding to at least 20 ECTS for an integrated master's degree of 300 ECTS.

In order to gain admission to the programme, the applicant must have a grade point average of C or better for the master's degree and for relevant subjects of the bachelor's degree. A more detailed description of admission requirements can be found here.

Applicants with a foreign education will be subjected to an evaluation of whether the educational background is equal to Norwegian higher education, following national guidelines from <u>NOKUT</u>.

If you are employed in the position, you will be provisionally admitted to the PhD programme. Application for final admission must be submitted no later than two months after taking up the position.

Inclusion and diversity

UiT The Arctic University of Norway is working actively to promote equality, gender balance and diversity among employees and students, and to create an inclusive and safe working environment. We believe that inclusion and diversity are a strength and we want employees with different competencies, professional experience, life experience and perspectives.

If you have a disability, a gap in your CV or immigrant background, we encourage you to tick the box for this in your application. If there are qualified applicants, we invite at least one in each group for an interview. If you get the job, we will adapt the working conditions if you need it. Apart from selecting the right candidates, we will only use the information for anonymous statistics.

We offer

- An internationally recognized research environment
- · An international research environment with a generous visitor program
- · Opportunities for visiting the best chemistry research groups in the world
- Transferable skills training and a supervised career development plan
- A fully funded PhD position with a salary grade 54 on the pay scale for Norwegian state employees, corresponding to a gross annual salary of NOK 491 200
- · Attractive welfare benefits and a generous pension agreement
- · Family-friendly policies and surroundings
- More practical information for working and living in Norway can be found here: https://uit.no/staffmobility

Application

Your application must include:

- Cover letter explaining your motivation and research interests
- CV
- Diploma for bachelor's and master's degree
- Transcript of grades/academic record for bachelor's and master's degree
- Explanation of the grading system for foreign education (Diploma Supplement if available)
- Documentation of <u>English proficiency</u>
- References with contact information
- · Master's thesis, and any other academic works

Qualification with a master's degree is required before commencement in the position. If you are near completion of your master's degree, you may still apply and submit a draft version of the thesis and a statement from your supervisor or institution indicating when the degree will be obtained. You must document completion of your degree before commencement in the position. You must still submit your transcripts for the master's degree with your application.

All documentation to be considered must be in a Scandinavian language or English. Diplomas and transcripts must also be submitted in the original language, if not in English or a Scandinavian language. We only accept applications and documentation sent via Jobbnorge within the application deadline.

General information

The appointment is made in accordance with State regulations and guidelines at UiT. At our website, you will find more <u>information for applicants</u>.

A shorter period of appointment may be considered, in case the PhD Fellow has already completed parts of their research training programme or when the appointment is based on a previous qualifying position PhD Fellow, research assistant, or the like in such a way that the total time used for research training amounts to three years.

Remuneration for the position of PhD Fellow is in accordance with the State salary scale code 1017. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted.

We process personal data given in an application or CV in accordance with the Personal Data Act (Offentleglova). According to the Personal Data Act information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure. You will receive advance notification in the event of such publication, if you have requested non-disclosure.

UiT - Developing the High North

UiT is a multi-campus research university in Norway and the northernmost university of the world. Our central location in the High North, our broad and diverse research and study portfolio, and our interdisciplinary qualities make us uniquely suited to meet the challenges of the future. At UiT you can explore global issues from a close-up perspective.

Credibility, academic freedom, closeness, creativity and commitment shall be hallmarks of the relationship between our employees, between our employees and our students and between UiT and our partners.

Jobbnorge-ID: 222218, Søknadsfrist: 20. april 2022