

UiT The Arctic University of Norway Department of Geosciences

Jobbnorge ID: 282693 **Deadline:** 9/5/2025

Website: https://uit.no/startsida

Scope: Fulltime

Duration: Fixed Term

Faculty of Science and Technology

PhD fellow in Solid Earth Sciences

The position

A PhD position is available at the <u>Department of Geosciences, Faculty of Science and Technology</u> in Solid Earth Sciences examining the impact of deformation and metamorphism on graphite ore mineralization in Precambrian rocks of northern Norway. The project is within the <u>Solid Earth Sciences, Mineral Resources and Geohazards</u> group.

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

The position's field of research

Graphite has been classified as a Critical Raw Material (CRM) for the EU/EEA economy due to its essential role in the green energy transition and to the limited availability of European resources. Northern Norwegian terrains such as Vesterålen and Senja possess substantial graphite potential that could contribute to mitigating the European supply risk. Here, graphite mineralization is hosted in Precambrian rocks of the West Troms Basement Complex (WTBC), with its formation intricately linked to the region's complex tectonic and metamorphic history. Although it has been documented that graphite can be mobilized and accumulated along structural weaknesses such as ductile shear zones and fold hinges under high-grade metamorphic conditions, the exact mechanisms (dissolution-precipitation vs. dynamic recrystallization vs. mechanical transport vs. partial melting), the extent of mobility and role of fluids remain debated. The link between graphite crystallinity, flake size, and purity (all being important for industrial applications) and its formation history is not fully understood. Therefore, the numerous graphite occurrences in the WTBC provide a natural laboratory for investigating the mechanisms of graphite formation, mobility, and concentration.

The PhD project will focus on the influence of geological factors on graphite deposits: structural and metamorphic evolution (number of events and timescales) and remobilization of graphite by deformation and/or fluids. Several graphite deposits will be targeted based on their suitability during reconnaissance field work. The research will involve a combination of several potential methods, including detailed field work, petrography and microstructural characterization, scanning electron microscopy analysis, Raman spectroscopy, fluid inclusion analysis, potentially appropriate petrochronological methods, and 3D geological modelling. The project will be conducted in partnership with LNS/Arctic Graphite, who are actively conducting exploration work on several graphite targets.

The applicants must present a description outlining the academic basis of the PhD project. The project description shall not exceed 3 pages, literature references included. It must include a description of the topic, research question(s) and a reasoning of the choices. It should also indicate the methodologies to be used. The final project description will be developed in cooperation with the supervisor.

Want to know more about the position?

For further information about the position, please contact Dr Carly Faber:

email: <u>carly.faber@uit.no</u>
 or Prof. Sabina Strmić Palinkaš:

• email: sabina.s.palinkas@uit.no

Qualifications

This position requires:

- · A master's degree in Geology, or equivalent, focusing on structural geology and/or metamorphic petrology
- Previous field experience and the ability to conduct field work in remote and physically demanding terrain in a cool, rainy climate

- Good written and oral skills in English and be able to work in an international environment. Nordic applicants can document their English
 capabilities by attaching their high school diploma.
- A driver's license that is valid in Norway (equivalent to Norwegian license class B), prior to starting the position

If you are near completion of your master's degree, you may still apply.

It is considered an advantage if you have:

- Experience working in deformed high-grade metamorphic and/or poly-metamorphosed rocks
- · Experience working with ore geology
- Experience with analytical methods (e.g., scanning electron microscopy, electron microprobe analysis, Raman spectroscopy, fluid inclusion analysis)
- Fluency in Norwegian or a Scandinavian language

In the assessment, the emphasis is on the applicant's potential to complete a research education based on the master's thesis or equivalent, and any other scientific work. The project description will also be considered. 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. We are looking for candidates who:

- · Have good collaboration skills
- · Have good communication and interaction with colleagues and students
- Wants to contribute to a good working environment

As many people 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.

In order to gain admission to the programme, the candidate must document sufficient potential for research. The applicant must have a grade point average of C (strong 3.0) or better for the master's degree, which must contain an independent work. A more detailed description of admission requirements can be found here.

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.

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 Norwegian Directorate for Higher Education and Skills. Depending on which country the education is from, one or two additional years of university education may be required to fulfil admission requirements, e.g. a 4-year bachelor's degree and a 2-year master's degree. UiT normally accepts higher education from countries that are part of the Lisbon Recognition Convention.

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

- · Involvement in an interesting research project
- Good career opportunities
- A good academic environment with dedicated colleagues
- Flexible working hours and a state collective pay agreement
- · Pension scheme through the state pension fund
- PhD Fellows are normally given a salary of 550 800 NOK/year with a 3% yearly increase
- If you have to relocate to Tromsø then the <u>Faculty of Science and Technology</u> may reimburse your moving costs. Further details regarding this matter will be made available if you receive an offer from us.

Norwegian health policy aims to ensure that everyone, irrespective of their personal finances and where they live, has access to good health and care services of equal standard. As an employee you will become member of the <u>National Insurance Scheme</u> which also include <u>health care services</u>.

More practical information about working and living in Norway can be found here: https://uit.no/staffmobility

How to apply

Your application must include:

- Cover letter explaining your motivation and research interests (max. 2 pages)
- CV
- Diploma for bachelor's and master's degree
- Official transcripts 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>
- Documentation of proficiency in Norwegian or a Scandinavian language (if applicable)
- · 2-3 references with contact information
- · Master's thesis or advanced thesis draft, and any other academic works
- Project description (not to exceed 3 pages)

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 still submit your transcript of grades 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 Scandinavian. If English proficiency is not documented in the application, it must be documented before starting in the position. 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>.

The engagement is to be made in accordance with the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment.

After the appointment you must assume that there may be changes in the area of work.

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. You will become a member of the Norwegian Public Service Pension Fund, which gives you many benefits in addition to a lifelong pension: You may be entitled to financial support if you become ill or disabled, your family may be entitled to financial support when you die, you become insured against occupational injury or occupational disease, and you can get good terms on a mortgage. Read more about your employee benefits at: spk.no.

A shorter period of appointment may be decided when 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.

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.

Assessment

The applicants will be assessed by an expert committee. The committee's mandate is to undertake an assessment of the applicants' qualifications based on the written material presented by the applicants, and the detailed description draw up for the position. A copy of the assessment report will be sent to all applicants.

The applicants who are assessed as best qualified will be called to an interview. The interview should among other things, aim to clarify the applicant's motivation and personal suitability for the position.

Eallju - Developing the High North

UiT The Arctic University of Norway is a multi-campus comprehensive university at the international forefront. Our vision is to be a driving force for developing the High North. The Northern Sami notion eallju, which means eagerness to work, sets the tone for this motive power at UiT. Along with students, staff and the wider community, we aim to utilise our location in Northern Norway and Sápmi, our broad and diverse research and study portfolio and interdisciplinary advantage to shape the future.

Our social mission is to provide research-based education of high quality, perform artistic development and carry out research of the highest international quality standards in the entire range from basic to applied. We will convey knowledge about disciplines and contribute to innovation. Our social mission unites UiT across various studies, research fields and large geographical distances. This demands good cooperation with trade and industry and civil society as well as with international partners. We will strengthen knowledge-based and sustainable development at a regional, national and international level.

Academic freedom and scientific and ethical principles form the basis for all UiT's activities. Participation, co-determination, transparency and good processes will provide the decision-making basis we need to make wise and far-sighted priorities. Our students and staff will have the opportunity to develop their abilities and potential. Founded on academic integrity, we will be courageous, committed and generous in close contact with disciplines, people and contemporary developments.

We will demonstrate adaptability and seek good and purposeful utilisation of resources, so we are ready to meet the expectations and opportunities of the future. We will strengthen the quality and impact of our disciplines and core tasks through the following three strategic priority areas.

Additional information

Place of service: Hansine Hansens veg18 9019 Tromsø (Tromsø - Romsa Municipality)