

**Jobbnorge ID:** 241901  
**Deadline:** 4/10/2023  
**Website:** <http://www.ntnu.no>  
**Scope:** Fulltime  
**Duration:** Fixed Term

The Department of Materials Science and Engineering has a vacancy for a

## Postdoctoral Fellow in materials science of next-generation ferroelectric functional materials

### This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 43,000 students work to create knowledge for a better world.

You can find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

### About the job

A postdoctoral fellow position in the field of materials science with a focus on functional ferroelectric materials for next-generation applications is available. The successful candidate will be affiliated to the FACET research group at the Department of Materials Science and Engineering at NTNU, working in a multidisciplinary and international environment. Our group is internationally renowned for its research on ferroic materials, covering materials modelling, synthesis, and multiscale characterization. Additional information about the research group can be found [here](#). The postdoctoral fellow will be part of a strategic project funded by NTNU's Rector to promote excellence in science.

This postdoctoral candidate will focus on the development of a new class of recyclable ferroelectrics based on supramolecular materials of abundant and benign elements. The postdoctoral fellow will prepare new supramolecular ferroelectrics, characterize their ferroelectric properties and correlate this to their crystal structure studied by transmission electron microscopy and in-situ synchrotron X-ray diffraction. Finally, the candidate will develop prototype devices with the new materials. The postdoctoral fellowship position is a temporary position with the main goal to qualify for work in senior academic positions.

### Duties of the position

The postdoctoral fellow will contribute to the development of new recyclable functional materials for devices for ICT and health through both experimental studies and modelling. The experimental work includes the development of a new family of materials, characterisation of the materials using advanced methodologies and testing of prototype device structures. The results of the project are expected to be published in scientific journals and at national and international conferences. As part of this NTNU financed position, the successful candidate is expected to take an active role in the acquisition of external funding through national and international excellence programs.

### Required selection criteria

- You must have successfully completed a Norwegian doctoral degree or corresponding foreign doctoral degree recognized as equivalent to a Norwegian PhD in materials science, materials chemistry or materials physics.
- If you can document that the PhD thesis has been submitted, your application can be assessed even if you have not yet defended your dissertation. Documentation of the obtained doctoral degree must be presented before you can take up the position.
- You must have an outstanding track-record in inorganic or supramolecular materials synthesis and characterisation.
- You must have the ability to generate and explore new ideas at the forefront in materials science.
- You must provide evidence of the ability to publish scientific high-quality papers.
- You must be able to communicate fluently in English and have good communication skills both orally and in writing.

The appointment is to be made in accordance with [Regulations on terms of employment for positions such as postdoctoral fellow, Ph.D Candidate, research assistant and specialist candidate](#).

### Preferred selection criteria

Candidates with documented expertise in advanced synthesis and characterization of ferroic inorganic or hybrid materials, including a strong background in solid state chemistry/physics, are desired. In addition, the ideal candidate has a strong background in oxide materials science and a good understanding of running complex experiments.

## Personal characteristics

the candidate should:

- be creative and innovative
- take responsibility for own progress and can work independently
- be able to collaborate closely with other members of the research team
- be diligent and able to show initiative on behalf of own work
- be structured, targeted and solution-oriented
- have personal skills like a positive and friendly attitude and contributing to a sustainable social environment

Emphasis will be placed on personal and interpersonal qualities.

## We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and [inclusive work environment](#) with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)
- [employee benefits](#)

## Salary and conditions

As a Postdoctoral Fellow (code 1352) you are normally paid from gross NOK 563 500 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund

The period of employment is 2 years. The period can be extended by teaching duties.

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. 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 to NTNU.

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

It is a prerequisite you can be present at and accessible to the institution on a daily basis.

## About the application

The application and supporting documentation to be used as the basis for the assessment must be in English or Norwegian.

Publications and other scientific work must follow the application. Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognizing that the quantity of your research may be reduced as a result.

The application must include:

- A cover letter describing the personal motivation, summarising scientific work, and how the applicant sees her/his background suitable
- CV and certificates
- transcripts and diplomas for bachelor's-, master's- and PhD degrees. If you have not yet completed your Ph.D, you must provide confirmation on your estimated date for the doctoral dissertation, or that your PhD thesis has been submitted
- A copy of the doctoral thesis. If you are close to submitting, or have recently submitted your thesis, you can attach a draft of the thesis. Documentation of a completed doctoral degree must be presented before taking up the position.
- Academic works - published or unpublished - that you would like to be considered in the assessment (up to 5 items)
- Research plan
- Name and contact information of three referees

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

## General information

[Working at NTNU](#)

NTNU believes that inclusion and diversity is a strength. We want our faculty and staff to reflect Norway's culturally diverse population and we continuously seek to hire the best minds. This enables NTNU to increase productivity and innovation, improve decision making processes, raise employee satisfaction, compete academically with global top-ranking institutions and carry out our social responsibilities within education and research. NTNU emphasizes accessibility and encourages qualified candidates to apply regardless of gender identity, ability status, periods of unemployment or ethnic and cultural background.

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**The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000.** The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

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As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you want to reserve yourself from entry on the public applicant list, this must be justified. Assessment will be made in accordance with [current legislation](#). You will be notified if the reservation is not accepted.

If you have any questions about the position, please contact Professor Mari-Ann Einarsrud, telephone +4748136521, email: [mari-ann.einarsrud@ntnu.no](mailto:mari-ann.einarsrud@ntnu.no). If you have any questions about the recruitment process, please contact Marie Kristiansen, e-mail: [marie.kristiansen@ntnu.no](mailto:marie.kristiansen@ntnu.no)

If you think this looks interesting and in line with your qualifications, please submit your application electronically via [jobb norge.no](http://jobb norge.no) with your CV, diplomas and certificates attached. Applications submitted elsewhere will not be considered. Upon request, you must be able to obtain certified copies of your documentation.

**Application deadline: 10.04.2023**

## NTNU

**NTNU - knowledge for a better world**

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

**The Faculty of Natural Sciences**

[The Faculty of Natural Sciences](#) is a key player in national and international research and education programmes in natural sciences and technology. Our research focuses on global challenges in the areas of energy, climate, the environment, food, water, health and welfare. The Faculty consists of eight departments as well as the Faculty Administration.

## Additional information

**Place of service:**

Trondheim 7491 Trondheim (Trondheim Municipality)