

Jobbnorge ID: 202222
Deadline: 4/11/2021
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Temporary

The Department of Biotechnology and Food Science has a vacancy for a

Postdoc position in biomaterials/biopolymer materials

This is NTNU

At NTNU, creating knowledge for a better world is the vision that unites our 7 400 employees and 42 000 students.

We are looking for dedicated employees to join us.

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

Video: <https://www.youtube.com/watch?v=clgKd1SwGLI>

About the position

The position is within an interdisciplinary team connected to the NTNU Health project "Tailored biomaterials with reduced immune responses". The overall goal of the project is to unravel biomaterial-host interaction for enabling novel designs of biomaterials in biomedical applications. The use of biomaterials in biomedical applications such as immune barrier in celltherapy represents a growing field and promising concepts for improving human health, but future therapies are challenged by the host responses towards the biomaterials.

In an interdisciplinary approach between NTNU Department of Clinical and Molecular Medicine (IKOM) and Department of Biotechnology and Food Sciences (IBT) we are developing materials (biotechnology) and exploring their host response by mapping surface-proteins (proteomics) and immune profile/mechanisms (immunology). A total of three positions (one PhD and two post docs) will be connected to the project. Information of the NTNU departments IBT and IKOM can be found online at <https://www.ntnu.edu/ibt> and <https://www.ntnu.edu/ikom>.

The postdoc position will focus on biopolymers and biomaterials, in particular fabrication and characterization of hydrogels. The appointment has duration of 3 years including teaching duties (one year). The postdoc position is available at the Department of Biotechnology and Food Sciences (IBT) within the research group of biopolymers and biomaterials (<https://www.ntnu.edu/ibt/research/biopol#/view/about>). The research group works on both basic and applied projects with a strong core of knowledge and expertise within structure-function relationships of polysaccharides.

You will report to Professor Berit Løkensgard Strand

Duties of the position

The postdoc is expected to take the main responsibility for planning and implementing experiments involving different biomaterials relevant for biomedical applications with a particular focus on hydrogels and alginates. The work will include enzymatic and/or chemical modifications of (bio)polymers (e.g. alginate, PEG, hyaluronan) and characterization on the polymer level (composition, Mw). Also, fabrication and characterization of the hydrogels (rheology, stability, mechanical resistance, surface properties) will be important. The post doc candidate is also expected to participate in evaluation of biomaterials in mice models with subsequent microscopic analyses. The candidate will be responsible for reporting relevant research results to the project consortium, to attend project meetings, and to write and publish results in peer reviewed scientific journals. We are seeking a team worker that is ambitious and highly motivated, who enjoys planning and executing laboratory work. Importantly, the candidate will have teaching duties involving lecturing, supervision and responsibility for lab courses.

Required selection criteria

The successful candidate should be creative, with a strong ability to work problem oriented. The candidate should also enjoy interdisciplinary research and take interest in learning and working in teams. We seek highly skilled persons with documented ability to conduct research within the fields of biomaterial sciences.

A postdoctoral research fellowship is a qualification position in which the main objective is qualification for work in academic positions. You must have completed a Norwegian doctoral degree in biopolymer/polymer chemistry, biomaterials, tissue engineering or related fields or corresponding foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree is required. The applicant should hold very good grades. Experience in fields related to the project such as biopolymer enzymatic and chemical modification, hydrogel characterization and imaging will be considered an advantage.

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 appointment is to be made in accordance with the regulations in force concerning [State Employees and Civil Servants and national guidelines for appointment as PhD, post doctor and research assistant](#).

The position requires spoken and written fluency in the English language.

Preferred selection criteria

- Experience in biopolymer and biomaterials characterization
- Experience in working with laboratory animals, in particular mice, and assessment of fibrotic responses on biomaterials
- Experience with confocal laser microscopy and/or rheological assessment

Personal characteristics

- work independently and with scientific, experimental and/or technological creativity
- motivated and excellent team player with positive attitude and with high ambitions on behalf of yourself and the group
- enjoy supervising younger researchers as well as teaching

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

The employment period is 3 years, including 1 year of teaching duties.

Postdoctoral candidates are placed in code 1352, and are normally remunerated at gross from NOK 545 300 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 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 daily.

About the application

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

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.

The application must include :

- CV, certificates and diplomas
- Academic works - published or unpublished - that you would like to be considered in the assessment (up to 5 works)
- Name and address of three referees
- Motivation letter

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 suitability.

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](#)

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

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.

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.

In accordance with The Public Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact Berit Løkensgard Strand, email: berit.l.strand@ntnu.no

Please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates. Applications submitted elsewhere will not be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from [China Credentials Verification \(CHSI\)](#).

If you are invited for interview you must include certified copies of transcripts and reference letters.

Please refer to the application number **NV-29/21** when applying.

Application deadline: 11.04.2021

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

Department of Biotechnology and Food Science

Our activities contribute to increased exploitation of existing and new ingredients for sustainable food production as well as next-generation energy solutions and medical technology. We educate graduates for a wide range of careers in industry, public administration and academia. [The Department of Biotechnology and Food Science](#) is one of eight departments in the [Faculty of Natural Sciences](#).

Additional information

Place of service:

Gløshaugen 7491 Trondheim (Trondheim Municipality)