

**Jobbnorge-ID:** 127099

**Søknadsfrist:** The application deadline has passed

**Nettside:**

**Omfang:**

**Varighet:**

## PhD position in Biopolymer research at Norwegian biopolymer laboratory - NOBIPOL

One PhD position is available at the NOBIPOL research group, Department of Biotechnology. The appointment has duration of 3 years with the possibility of until 1 year extension with 25% teaching duties in agreement with the department. (To undertake the teaching duties it is a requirement that the candidate speaks Norwegian or another Scandinavian language).

The position is financed by Research Council of Norway. More details about the individual position are stated below.

### Information about the department

The position is hosted at Norwegian biopolymer laboratory - NOBIPOL, the Department of Biotechnology at Faculty of Natural Sciences and Technology.

NOBIPOL is a multidisciplinary research group within NTNU devoted to the field Biopolymer Engineering, with main focus on the science and technologies of marine polysaccharides, in particular alginates and chitosans. On the basis of more than 60 years of continuous research in the field, NOBIPOL possesses unmatched competence and experience in all aspects of science and technology of marine polysaccharides. The current activities of NOBIPOL take place within the Department of Biotechnology, in close collaboration with the Department of Physics, the Department of Cancer Research and Molecular Medicine, as well as SINTEF Materials and Chemistry.

Currently, there are 12 professors, 3 associate professors, 4 adjunct professors and about 30 PhD research fellows and postdoctoral positions appointed at the Department of Biotechnology where 6 seniors and 8 juniors are associated with NOBIPOL. Further information is available at: <http://www.ntnu.edu/biotech>

### Job description and Qualifications

#### PhD position - Nature's Creation of non-Random Structures: Molecular Mechanisms for Processivity and Specificity of Polysaccharide Modifying Enzymes.

(Financed by The FriMedBio program at Research Council of Norway)

The PhD research aims at creating basic understanding of the structure and functions of enzymes acting on alginate and expands the knowledge on structural features that determine the extent of processivity and specificity for alginate C-5 epimerases. The project also has an applied perspective for targeted enzyme evolution using a computational approach. In addition, we expect that our research will facilitate the ultimate tailoring of the alginate biopolymer for novel industrial, medical and pharmaceutical applications, as well as improve existing applications.

The applicant must have an MSc (or equivalent) in Biotechnology or Biophysics/Nanotechnology. Experience in fields related to the project, such as biophysical characterization of protein-carbohydrate interactions (AFM, OT, ITC), carbohydrate chemistry, NMR spectroscopy, molecular genetics, production and purification of proteins, and chemoenzymatic modification of carbohydrates will be considered an advantage.

A successful applicant should be creative and ambitious person, with a strong ability to work problem oriented. She/he should also be flexible, enjoy interdisciplinary research, take keen interest in learning and been a team player.

### Other Qualifications

The regulations for PhD programs at NTNU state that a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale of A-E for passing grades (A best) for the two last years of the MSc is required and C or higher of the BSc. Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree:

[http://ec.europa.eu/education/tools/diploma-supplement\\_en.htm](http://ec.europa.eu/education/tools/diploma-supplement_en.htm)

The position requires spoken and written fluency in the English language. Applicants from non-English-speaking countries outside Europe must document English skills by an approved test. Approved tests are TOEFL, IELTS and Cambridge Certificate in Advanced English(CAE) or Cambridge Certificate of Proficiency in English (CPE).

Detailed information on our PhD programs is found at: <http://www.ntnu.edu/nt/research/phd>

#### Terms of employment

The appointment of the PhD fellows will be made according to Norwegian guidelines for universities and university colleges and to the general regulations regarding university employees. Applicants must agree to participate in organized doctoral study programs within the period of the appointment and have to be qualified for the PhD-study.

NTNU's personnel policy objective is that the staff must reflect the composition of the population to the greatest possible extent.

The position as PhD is remunerated according to the Norwegian State salary scale. There is a 2% deduction for superannuation contribution.

For further information can be obtained please contact.

Professor Finn L. Aachmann, e-mail: [finn.l.aachmann@ntnu.no](mailto:finn.l.aachmann@ntnu.no), Department of Biotechnology, NOBIPOL, NTNU.

Further information about the Department can be found at <http://www.ntnu.edu/biotech>

**The application**

Applications with CV, certificates from both Bachelor and Master, possible publications and other scientific works, copies of transcripts, (copies of documentation on English language proficiency test) and reference letters should be submitted. Furthermore, with the application we request a one-page "Personal Motivation Letter" for the individual position.

Applications must be submitted electronically through [www.jobbnorge.no](http://www.jobbnorge.no).

Applications submitted elsewhere will not be considered.

The reference number of the position is: NT- 64/16

Application deadline: 12th of August 2016

**Tilleggsinformasjon****Arbeidssted:**