

Jobbnorge ID: 199383 Deadline: 2/26/2021 Website: http://www.ntnu.no

Scope: Fulltime

Duration: Temporary

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

PhD position within Food Science and Biotechnology

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

We have a vacancy for a three-year PhD position related to the project "Disinfectants in food production: efficacy towards foodborne bacteria and potential cross-resistance to antibiotics (DisinfectAMR)"at the Department of Biotechnology and Food Science. The project is funded by the Research Council of Norway and is hosted by SINTEF Industry, Department of Biotechnology and Nanomedicine (BTN). The project will be conducted in close collaboration with industry partners as well as international partners. The PhD candidate will work at both NTNU and SINTEF laboratories and will be supported by a team of supervisors from both institutions.

The project addresses the role of food production and the environment as reservoirs of antimicrobial resistant (AMR) bacteria and the impact of disinfectants as potential drivers for persistence of AMR in food- and feed process plants. The project aims to investigate fundamental questions related to the efficacy of the disinfectants used in food production pipelines and resistance development towards disinfectants and cross-resistance to antibiotics. From a One-Health perspective, antimicrobial resistance in humans, animals and the environment cannot be viewed separately, and the whole value chain of food production should be considered with respect to food safety and spread of AMR.

You will report to Associate Professor Anita N. Jakobsen.

Duties of the position

- The candidate is specifically responsible for planning, accomplishing research activity and disseminate results related to the specific PhD project
- · Contribute in microbiological sampling in production plants and in rest raw materials
- Characterisation of microbial communities and resistance genes using state-of-the art sequencing technologies, gene expression
 analysis and isolation of pure cultures for determination of minimum inhibitory concentrations and biofilm properties
- The candidate is expected to be an active and cooperating partner in the project team.

Required selection criteria

The PhD-position's main objective is to qualify for work in research positions. The qualification requirement is that you have completed a master's degree or second degree (equivalent to 120 credits) with a strong academic background in Food Microbiology, Food Science, Biotechnology, or equivalent education with a grade of B or better in terms of NTNU's grading scale. If you do not have letter grades from previous studies, you must have an equally good academic foundation. If you are unable to meet these criteria you may be considered only if you can document that you are particularly suitable for education leading to a PhD degree.

The appointment is to be made in accordance with the regulations in force concerning <u>State Employees and Civil Servants and national guidelines for appointment as PhD, post doctor and research assistant.</u>

- Candidates will be evaluated based on their academic record
- Documented practical experience with microbiology and molecular biology (e.g. 16s rRNA gene sequencing, biofilm, screening of resistance properties of bacteria, bioinformatics)

· Documented excellent oral and written English skills

Preferred selection criteria

- · Relevant practice from the food industry
- · Experience from research and development

Personal characteristics

- · Highly motivated and enthusiastic about food microbiology, with a keen interest in a wider context than own research
- · Open minded and interest for exploring new methodology in the research field
- The applicants should be genuinely interested in scientific research and its industrial applications as well as scientific dissemination.
- · Ability to work independently as well as in team

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

PhD candidates are remunerated in code 1017, and are normally remunerated at gross from NOK 482 200 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 3 years.

Appointment to a PhD position requires that you are admitted to the PhD programme in Biotechnology (https://www.ntnu.edu/studies/phbiot) within three months of employment, and that you participate in an organized PhD programme during the employment period.

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 or a Scandinavian language.

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
- Name and address of three referees
- Up to one page "Personal motivation letter" for the position

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, as well as motivation, in terms of the qualification requirements specified in the advertisement.

NTNU is committed to following evaluation criteria for research quality according to <u>The San Francisco Declaration on Research Assessment - DORA.</u>

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.

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 Associate Professor Anita N. Jakobsen, email anita.n.jakobsen@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-10/21 when applying.

Application deadline: 26.02.2021

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Additional information

Place of service:

Akrinn 7491 Trondheim (Trondheim Municipality)