

**Jobbnorge ID:** 210012  
**Deadline:** 9/15/2021  
**Website:** <http://www.uis.no/>  
**Scope:** Fulltime  
**Duration:** Fixed Term

## PhD Fellowship in Environmental Engineering

### Job description

The University of Stavanger invites applicants for a PhD Fellowship in Environmental Engineering at the Faculty of Science and Technology, Department of Chemistry, Bioscience and Environmental Engineering. The position is vacant for accession as soon as possible.

This is a trainee position that will give promising researchers an opportunity for academic development through a PhD education leading to a doctoral degree.

The hired candidate will be admitted to the PhD program in Science and Technology. The education includes relevant courses to about six months of study, a dissertation based on independent research, participation in national and international research environments, relevant academic communication, a trial lecture and public defence. Read more about the PhD education at UiS on [our website](#).

The appointment is for three years with research duties exclusively.

### Research topic

The PhD Fellow will be affiliated with the following project "Production of renewable hydrocarbon fuels via conversion of algae biomass using Hydrothermal liquefaction and solar hydrogen" -International Research Collaboration Co-Fund (IRCC)-grant, a collaboration between the University of Stavanger and Qatar University.

The goal of this project is to produce renewable hydrocarbon fuel from sunlight, algae, water, and supply of already collected CO<sub>2</sub> from the natural gas processing units. The resources mentioned above can be effectively utilized to convert CO<sub>2</sub> and sunlight into algae biomass. This project will apply innovative hydrothermal liquefaction (HTL) technology to liquefy algae into bio-crude.

The successful applicant will mainly contribute to the array of multidisciplinary areas such as algal isolation, growth, cultivation, and harvesting. The candidate will also hydrotreat the biocrude into renewable hydrocarbons using solar hydrogen. Finally, the candidate will optimize and demonstrate the economic and energy efficiency of the whole biorefinery process by means of techno-economic analysis and other modelling techniques.

### Project proposal

As an applicant, you must prepare a preliminary project proposal for a doctoral project within the subject area, which explains the problem, relevance, theoretical and methodological approach. Your preliminary project proposal will be included in the application assessment.

During the first three months of the employment period, the project proposal and progress plan will be further developed in cooperation with your supervisors and completed for the final plan for the PhD-project. A project proposal template can be found [here](#).

### Qualification requirements

We are looking for applicants with a strong academic background who have completed a five-year master degree (3+2) within Environmental Science/Engineering, Chemical Engineering og Bioengineering, preferably acquired recently; or possess corresponding qualifications that could provide a basis for successfully completing a doctorate.

The applicants must:

- have documented knowledge and skills in environmental/bioengineering and environmental biotechnology
- have experimental and analytical laboratory skills

To be eligible for admission to the doctoral programmes at the University of Stavanger both the grade for your master's thesis and the weighted average grade of your master's degree must individually be equivalent to or better than a B grade. If you finish your education (masters degree) in the fall 2021, you are also welcome to apply.

Applicants with an education from an institution with a different grade scale than A-F, and/or with other types of credits than sp/ECTS, must attach a confirmed conversion scale that shows how the grades can be compared with the Norwegian A-F scale and a Diploma Supplement or similar that explains the scope of the subject that are included in the education. [You can use these conversion scales to calculate your points for admission.](#)

Emphasis is also placed on your:

- laboratory experience in lab scale photobioreactors and algal bioprocessing, as well as various reactor operation for biofuel production
- experience and knowledge on biorefineries
- experience in analytical methods and instrumental analysis such as GC-MS, HPLC and more
- experience with scientific work related to techno-economic analysis, and skills for performing and disseminating these
- participation in workshops or skillsets related to Techno-economic analysis of biorefineries
- documented research experience and ability to write scientific publications
- professional and personal skills for completing the doctoral degree within the timeframe
- ability to work independently and in a team, be innovative and creative
- ability to work structured and handle a heavy workload
- having a good command of both oral and written English

## Requirements for competence in English

A good proficiency in English is required for anyone attending the PhD program. International applicants must document this by taking one of the following tests with the following results:

- TOEFL - Test of English as a Foreign Language, Internet-Based Test (IBT). Minimum result: 90
- IELTS - International English Language Testing Service. Minimum result: 6.5
- Certificate in Advanced English (CAE) og Certificate of Proficiency in English (CPE) from the University of Cambridge
- PTE Academic - Pearson Test of English Academic. Minimum result: 62

The following applicants are exempt from the above requirements:

- Applicants with one year of completed university studies in Australia, Canada, Ireland, New Zealand, United Kingdom, USA
- Applicants with an International Baccalaureate (IB) diploma
- Applicants with a completed bachelor's and / or master's degrees taught in English in a EU/EEA country

## We offer

- a PhD education in a large, exciting and socially important organisation
- an ambitious work community which is developing rapidly. We strive to include employees at all levels in strategic decisions and promote an informal atmosphere with a flat organisational structure.
- colleague-based guidance programme ([NyTi](#)) if teaching is a part of your position
- salary in accordance with the State Salary Scale, l.pl 17.515, code 1017, NOK 491 200 gross per year with salary development according to seniority in the position. A higher salary may be considered in special cases. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.
- automatic membership in the [Norwegian Public Service Pension Fund](#), which provides favourable insurance- and retirement benefits
- favourable membership terms at a gym and at the [SIS sports club](#) at campus
- employment with an Inclusive Workplace organisation which is committed to reducing sick leave, increasing the proportion of employees with reduced working capacity, and increasing the number of professionally active seniors
- "[Hjem-jobb-hjem](#)" discounted public transport to and from work
- as an employee in Norway, you will have access to an optimal health service, as well as good pensions, generous maternity/paternity leave, and a competitive salary. Nursery places are guaranteed and reasonably priced
- [relocation programme](#)
- [language courses](#): On this page you can see which language courses you may be entitled to (look up "language courses" under employment conditions)

## Diversity

University of Stavanger values independence, involvement and innovation. Diversity is respected and considered a resource in our work and learning environment. Universal design characterises physical and digital learning environments, and we strive to provide reasonable adjustments for employees with disabilities.

You are encouraged to apply regardless of gender, disability or cultural background.

The university aims to recruit more women within the subject area. If several applicants are considered to have equal qualifications, female applicants will be given priority.

## Contact information

More information on the position and project description can be obtained from Professor Gopalakrishnan Kumar, tel: +47 51 83 30 26, e-mail: [gopalakrishnan.kumar@uis.no](mailto:gopalakrishnan.kumar@uis.no) or Head of department Ingunn W. Jolma, e-mail: [ingunn.w.jolma@uis.no](mailto:ingunn.w.jolma@uis.no).

Information about the appointment procedure can be obtained from HR consultant Rosa Andrade, tel: +47 51 83 11 91, e-mail: [rekruttering@uis.no](mailto:rekruttering@uis.no).

## Application

To apply for this position please follow the link "Apply for this job". Your application letter, relevant education and work experience as well as language skills must be registered here. In your application letter, you must state your research interests and motivation for the position.

The following documents must be uploaded as attachments to your application:

- project proposal, a project proposal template [can be found here](#).
- CV with a full summary of your education and experience
- references, certificates/diplomas and other documentation that you consider relevant
- Diploma Supplement or similar and a confirmed conversion scale if this is required

- documentation on competence in English if this is required
- publications or other relevant research work

Applications are evaluated based on the information available in Jobbnorge at the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above and that you have attached the necessary documentation.

The documentation must be available in either a Scandinavian language or in English. If the total size of the attachments exceeds 30 MB, they must be compressed before upload.

Please note that information on applicants may be published even if the applicant has requested not to be included in the official list of applicants - see [Section 25 of the Freedom of Information Act](#). If your request is not granted, you will be notified.

UiS only considers applications and attachments registered in Jobbnorge.

## General information

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 UiS.

Employment as PhD Fellow is regulated in "[Regulations concerning terms and conditions of employment for the posts of post-doctoral research fellow and research fellow, research assistant and resident](#)".

Your qualifications for the position, based on documentation registered in Jobbnorge, will be assessed by an internal expert committee. Based on the committee's statement, relevant applicants will be invited to an interview before any recommendations are made. References will also be obtained for relevant candidates. [More about the hiring process on our website.](#)

The appointee will be based at the University of Stavanger, with the exception of a stay abroad at a relevant centre of research.

It is a prerequisite that you have a residence which enables you to be present at/available to the academic community during ordinary working hours.

The position has been announced in both Norwegian and English. In the case of differences of meaning between the texts, the Norwegian text takes precedence.

## UiS - challenge the well-known and explore the unknown

The University of Stavanger (UiS) has about 12,000 students and 1,900 employees. The university has high ambitions. We strive to have an innovative and international profile, and be a driving force in knowledge development and in the process of societal change. Our common direction is driven by consideration for sustainable change and equitable social development, through new ways of managing natural resources and facilitating better cities and local communities. Energy, health and welfare, learning for life are our focus areas.

In constant collaboration and dialogue with our surroundings, regionally, nationally and internationally, we enjoy an open and creative climate for education, research, innovation, dissemination and museum activities. Academic life at the University of Stavanger is organised into six faculties comprising various departments/schools and National Research Centres, as well as the Museum of Archaeology. We are a member of the European Consortium of Innovative Universities. The university is located in the most attractive region in the country with more than 300,000 inhabitants. The Stavanger region has a dynamic labour market and exciting cultural and leisure activities.

Together with our staff and students we will challenge the well-known and explore the unknown.

**The Faculty of Science and Technology** offers study programs at bachelor, master and doctoral level. The faculty has established close cooperation on research with NORCE (Norwegian Research Centre AS) and the regional industry. A number of master's and doctoral theses are made in collaboration with the industry. The faculty has established research collaborations with universities in the US and Europe, and has developed academic environments that are at the forefront internationally. These include Petroleum and Offshore Technology as well as Risk Management and Societal Safety, which constitute two of the university's strategic focus areas. The faculty has about 2,800 students and approximately 400 employees at the Department of Electrical Engineering and Computer Science, Department of Structural Engineering and Materials Science, Department of Mathematics and Physics, Department of Energy and Petroleum Engineering, Department of Energy Resources and the Department of Safety, Economics and Planning.

**The Department of Chemistry, Bioscience and Environmental Technology** offers study programs at all levels within the areas Biological Chemistry, Chemistry and Environment. The department is responsible for basic tuition in chemistry at the faculty. There are currently about 60 employees including doctoral and postdoctoral fellows, and 230 students at the department.

## Additional information

### Place of service:

Ullandhaug 4021 Stavanger (Stavanger Municipality)