Jobbnorge ID: 265597
Deadline: 8/31/2024
Website: http://www.ntnu.no
Scope: Fulltime
Duration: Temporary

The Department of Chemical Engineering has a vacancy for a

Temporary Researcher in Direct conversion of CO2 to Fuels - conceptual process design

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

Researcher position is a temporary position where the main goal is to qualify for work in senior academic positions. The position may also qualify for a permanent position at the department.

Duties of the position

- Fitting existing kinetic model structures to experimental data generated in this project and if necessary, modify model structures
- Develop product distribution models and validate against experimental data
- Apply the models to generate a staged Fischer-Tropsch synthesis process with a path optimization method
- Develop the whole process concept and develop a steady-state model of the concept
- Optimize the entire process
- Economic evaluation of the project

Required selection criteria

- You must have completed a Norwegian doctoral degree or corresponding foreign doctoral degree recognized as equivalent to a Norwegian PhD in Chemical Engineering. 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.
- Skilled in using tools for process simulation and optimization.
- Good knowledge of statistical analysis of experimental data, non-linear model regression and design of experiments.
- Good knowledge of process design and heat integration.
- Programming skills
- Good written and oral English language skills

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

Preferred selection criteria

- Background in process system engineering
- Knowledge of Fischer-Tropsch synthesis

Personal characteristics

- Positive, creative, result oriented with good work moral
- Analytical and accurate and seeks new challenges at work

- Communicates information and results with clarity and ease, both orally and in writing
- Interested in teaching

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

The gross salary for the position of researcher (code 1109) is remunerated 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.

The position is subject to external funding and the period of employment is **2** years.

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

About the application

The application and supporting documentation must be in English.

Please note that your application will be considered based solely on information submitted by the application deadline. You must therefore ensure that your application clearly demonstrates how your skills and experience fulfil the criteria specified 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:

- CV, certificates and diplomas
- Academic works - published or unpublished - that you would like to be considered in the assessment (up to 10 works)
- A description of the academic/artistic works that you regard as most relevant and that you particularly want to be taken into account in the assessment
- Research plan
- Details of the projects you have managed, with information about funding, duration and size
- Names and contact information for three relevant referees

Joint work will also be considered. If it is difficult to identify your specific input to a joint project, you must include evidence of your contributions.

In the assessment of the best qualified applicant, we will emphasize education, experience and personal suitability as well as your motivation for the position.

NTNU is committed to following evaluation criteria for research quality according to The San Francisco Declaration on Research Assessment - DORA. This means that we pay special attention to the quality and professional breadth of these works. We also consider experience from research management and participation in research projects. We place great emphasis on your scientific work from the last five years.

General information

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.

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.

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 Magne Hillestad, telephone +4795891468, email magne.hillestad@ntnu.no. . If you have any questions about the recruitment process, please contact Merete Thyholdt, email:

merete.thyholdt@ntnu.no.

If you think this looks interesting and in line with your qualifications, please submit your application electronically via jobbnorge.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: 31.08.2024

NTNU - knowledge for a better world

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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 Chemical Engineering

We take chemistry from laboratory scale to industrial production. This demands a wide range of knowledge, from molecular processes and nanotechnology to building and operation of large processing plants. We educate graduates for some of Norway's most important industries. The Department of Chemical Engineering is one of eight departments in the Faculty of Natural Sciences.

Additional information

Place of service:

Høgskoleringen 1 7491 Trondheim (Trondheim Municipality)