

# We are looking for a candidate for a position as

# **Professor/Associate Professor in Physical Chemistry**

# 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.

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

# About the position

The Department of Chemistry are seeking a candidate for a position as Professor or Associate Professor in Physical Chemistry with special emphasis on non-equilibrium thermodynamics. The Department has 11 full professors and 10 associate professors. The professor or associate professor will be responsible for continuing the department's activities in non-equilibrium thermodynamics and classical thermodynamics. The department's strategy in this field focus on applications to confined, nanosized systems. This includes supervision and guidance on the top level in NTNU's Center of Excellence "PoreLab", which is in its third year of a ten-year program. More information about PoreLab can be found at: <a href="http://www.porelab.no">www.porelab.no</a>.

The position will focus on development of theory in combination with experiments and computer simulations with applications to transport processes in systems of current interest, such as porous media in general, soft matter, biological systems, and electrochemical systems.

The following are some examples of current activities:

- · Non-equilbrium thermodynamics applied to fluid flow in porous media
- · Analysis of electrochemical energy systems (batteries, fuel cells)
- Transport in biological membranes
- · Coupled transport of heat and matter
- Thermodynamics of surfaces
- Thermodynamics of nanosystems

More information about the department's activities can be found at https://www.ntnu.no/kjemi

You will report to the head of the Department of Chemistry.

# Duties of the position

The successful candidate will share her/his time between research and teaching.

- The candidate is expected to strengthen the research profile and the leadership of the department and of the PoreLab centre
- The candidate is expected to develop a strong program of externally funded research and scholarships.
- The candidate will enter the pool of faculty members that take responsibility for teaching all basic courses in physical chemistry.
- The candidate is expected to collaborate with experimental scientists at NTNU.

# **Required selection criteria**

Professor:

The position of Professor within (subject area) requires that you meet the criteria in the <u>Regulations concerning appointment and promotion to</u> teaching and research posts section 1-2.

- Your academic work must be within thermodynamics/physical chemistry with a special and broad competence in non-equilibrium thermodynamics.
- Your academic work must be of high international quality, with published articles in peer reviewed journals.
- You must have the ability to and experience in initiating and leading research and development work, and in obtaining external funding for research. You will be expected to be able to apply for Research Council of Norway/ERC grants.

In addition to formal qualifications in teaching at university level, you must document

- · development in teaching and counselling of students over time
- extensive experience with supervision preferably at the master / PhD level
- participation in the development of educational quality in a work environment

### Associate Professor:

The position of Associate Professor within physical chemistry requires that you meet the criteria in the <u>Regulations concerning appointment and</u> promotion to teaching and research posts section 1-4.

- You should have demonstrated research experience in thermodynamics/physical chemistry with a special and broad competence in nonequilibrium thermodynamics.
- You must have a minimum of two years of research experience after your PhD
- You must have the ability to and experience in initiating and leading research and development work, and in obtaining external funding for research. You will be expected to be able to apply for Research Council of Norway/ERC grants.

#### Common:

You will be expected to deliver high-quality teaching at undergraduate and postgraduate levels, and undertake supervision of Masters and Doctoral candidates. Evaluation of these skills will be based on documented experience and relevant teaching qualifications. Applicants with teaching experience at university level are preferred. Quality and breadth of the teaching qualifications will be evaluated.

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

You must document relevant basic competence for teaching and supervision at university/higher education-level, ref. <u>Regulations</u>. If this cannot be documented, you are required to complete an approved course in university teaching within two years of commencement. NTNU offers qualifying courses.

It is a prerequisite that within three years of appointment, new employees who do not speak a Scandinavian language can demonstrate skills in Norwegian or another Scandinavian language equivalent to level three in the <u>course for Norwegian for speakers of other languages at the</u> <u>Department of Language and Literature at NTNU.</u>

Please see the Regulations concerning appointment and promotion to teaching and research posts for general criteria for the position.

### Personal characteristics

- · Demonstrated strong academic background
- Teamwork skills
- · Interest in multidisciplinary activities in chemistry, physics, and engineering
- Ability to initiate new projects

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

### We offer

- · exciting and stimulating tasks in a strong international academic environment
- an open and <u>inclusive work environment</u> with dedicated colleagues
- favourable terms in the Norwegian Public Service Pension Fund
- employee benefits

### Salary and conditions

The position as Professor and Associate Professor is remunerated according to the Norwegian State salary scale. 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 that you can be present at and accessible to the institution on a daily basis.

# About the application

The application and supporting documentation must be in English.

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.

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 considered in the
  assessment
- Name and address of three referees
- Research plan (maximum 10 pages), divided into:
  - A statement of the research interests of the candidate (maximum 5 lines)
    - A statement on long term research goals in a 10-15 year perspective, which includes a discussion on connection to previous work, outlines possible collaborations and includes a rough plan on how funding should be achieved for these activities (not more than 2 pages).
  - A 5-year plan outlining actual research to be performed and possible funding schemes for these plans (not more than 7 pages).
  - Details of teaching qualifications based on <u>"Documentation of applicant's teaching qualifications in connection with appointment to an</u> academic position at NTNU"
- Details of the projects you have managed, with information about funding, duration and size

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.

Your application will be considered by an expert committee and the most suitable applicants will be invited to interview and to deliver a lecture.

### **General information**

A good working environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background. NTNU wishes to increase the proportion of women in its academic positions, and women are therefore encouraged to apply.

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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.

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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.

Under the Freedom of 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 Department head Hallstein Hemmer, telephone +47 73 55 96 48/ +47 922 38 232, email: hallstein.hemmer@ntnu.no.

Please submit your application and supporting documentation via jobbnorge.no. If you are invited for interview, you must bring certified copies of certificates and diplomas. Mark the application with reference number: NV 61/20.

#### Application deadline: 15.06.2020

### 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 Chemistry**

We educate graduates for careers in environmental science, industry, the school system, research and public administration. Chemistry is also a basic discipline for medicine, biology and technology, and an important key in issues related to energy, climate, the environment, food, water and health. Research activities at the Department range from environmental chemistry to applied theoretical chemistry. <u>The Department of Chemistry</u> is one of eight departments in the <u>Faculty of Natural Sciences</u>.

Jobbnorge ID: 186599, Deadline: 15.06.2020, Customer reference: 2020/12032