

## NTNU - knowledge for a better world

*The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.*

**Faculty of Natural Sciences**  
**Department of Physics**

# PoreLab announces several PhD and postdoc positions

PoreLab is a Norwegian Center of Excellence created in 2017 and situated at the Norwegian University of Science and Technology (NTNU) in Trondheim, and the University of Oslo (UiO). It focuses on the physics of porous media using experimental, theoretical and computational methods. It is led by five principal scientists from physics, chemistry and reservoir engineering.

PoreLab announces a number of PhD and postdoctoral positions. The PhD positions are for three years. The postdoctoral positions are for two years.

The themes of the positions are in the following fields:

1. Thermodynamics of multiphase flow in porous media,
2. Deformable porous media,
3. Characterization of steady-state flow in porous media,
4. Transient immiscible two-phase flow,
5. Thermodynamic driving forces in porous media flow,
6. Microfluidics and field studies, or
7. Porous layers for PEM fuel cells and CO<sub>2</sub> sequestration.

The applicants for the PhD/postdoctoral positions must have a strong MSc/PhD (or equivalent) in physics, physical chemistry or engineering. We are seeking candidates with a good understanding and competence in non-equilibrium thermodynamics, statistical thermodynamics and/or fluid or granular dynamics in/of porous media. They should have skills in either computational or experimental methods.

The successful candidates should be creative, with a strong ability to work problem-oriented and collaborate with others who use different methods. They should enjoy interdisciplinary research and take keen interest in learning and working in teams. The positions require spoken and written fluency in the English language.

It is expected that the postdoctoral appointees actively pursue possibilities for new projects within the field by participating/submitting applications to the European Union, the Research Council of Norway and/or industry. They will also take part in the supervision of students.

The positions offer excellent possibilities for young scientists to qualify for academic and/or industrial careers.

The positions will be distributed between the Department of Physics, Department of Chemistry and Department of Geoscience and Petroleum at the NTNU and the Department of Physics at the UiO.

## Information specific to the NTNU

The Department of Physics at the NTNU Faculty of Natural Sciences has at present 26 professors, 10 associate professors, 8 adjunct professors, 52 PhD research fellows and 21 postdoctoral fellows or researchers. Further information is available at <http://www.ntnu.no/fysikk/english>.

Department of Chemistry at the NTNU Faculty of Natural Sciences has at present 12 professors, 9 associate professors, 3 adjunct professors, 23 PhD research fellows and 5 postdoctoral fellows. Further information is available at <http://www.ntnu.edu/chemistry>.

The Department of Geoscience and Petroleum at the Faculty of Engineering at the NTNU, has at present 23 professors, 12 associate professors, 33 adjunct professors/adjunct associate professors, and about 100 PhD and postdoctoral fellows. The department annually graduates about 170 students with a master degree. Further information is available at <http://www.ntnu.edu/igp>.

At the NTNU, there is a possibility for extending the PhD positions to a possible fourth year including 25 % teaching duties in agreement

with the department. The postdoc positions may likewise be extended to a third year including 20 % teaching duties in agreement with the department.

PhD Candidates at the NTNU are remunerated in code 1017, and are normally remunerated at gross NOK 432 300 before tax. There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross wage. Postdoctoral candidates at the NTNU are remunerated in code 1352, and are normally remunerated at gross from NOK 485 700 per annum before tax. There will be a 2% deduction to the Norwegian Public Service Pension Fund from gross wage.

The regulations for PhD programs at NTNU state that a Master degree or equivalent with at least five 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. 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/lifelong-learning-policy/ds\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/ds_en.htm).

### Information specific to the UiO

The Department of Physics at the UiO has approximately 200 employees, of which some 50 are permanent scientific positions. On a yearly basis around 20 students obtain their PhD degree and 50 obtain their MSc degree. For further information, please see <http://www.mn.uio.no/fysikk/english>.

PhD positions at the UiO: Position code 1017, Salary: NOK 432 700 - 489 300 per year (pay grade 50 - 57). Postdoc positions at the UiO: Position code 1352, Salary: NOK 486 100 - 567 100 per year (pay grade 57 - 65), depending on qualifications and seniority.

At the UiO, the following grade criteria apply to admission to the PhD program in natural sciences:

- | The average grade for the BSc degree must not be lower than a C,
- | The average grade for MSc level courses must not be lower than a B,
- | The MSc dissertation must have grade B or higher.

### General information

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

An expert committee will evaluate the applications. Information and materials that should be considered by the committee must be submitted within the deadline. Applicants may be called in for interview.

The NTNU and UiO personnel policy objective is that the staff must reflect the composition of the population to the greatest possible extent.

The positions are remunerated according to the Norwegian State salary scale. There is a 2% deduction for superannuation contribution.

For further information concerning the positions, please contact professor Alex Hansen, Department of Physics, NTNU, email: [alex.hansen@ntnu.no](mailto:alex.hansen@ntnu.no) or professor Knut Jørgen Måløy, Department of Physics, UiO, email: [k.j.maloy@fys.uio.no](mailto:k.j.maloy@fys.uio.no).

An application letter describing the candidate's motivation, skills and personal qualifications for the position including an indication if he/she applies for a position at NTNU or/and at UiO, a CV, possible publications and other scientific works, certified copies of transcripts, and reference letters must be submitted electronically through this page.

Applications submitted elsewhere will not be considered.

The deadline for submission of applications is May 14, 2017.

The reference number of the positions is NV-69/17.

Jobbnorge-ID: 137408, Søknadsfrist: Avsluttet