

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 Engineering
Department of Energy and Process Engineering

PhD position within ageing and modelling of secondary Li-ion batteries (IV-198/18)

Description

A PhD position within the topics of ageing and characterization of Li-ion batteries is available at department of Energy and Process Engineering, IV-faculty, NTNU. The research tasks may include numerical modelling using MatLab/Python and /or Comsol Multiphysics, and to acquire new experimental data by different measurements techniques. Relevant measurements techniques can be thermal conductivity measurements, entropy measurements, imbedding of optical and electrical sensors into battery systems and single cells.

The research project is related to a larger competence project within safety, lifetime and modelling of Li-ion batteries in the marine sector and is a joint effort between NTNU, IFE and FFI. The candidate must therefore be able to get clearance to work at the Norwegian Defence Research Institute (FFI) before being hired.

Qualifications

Required qualifications

- Master's degree with average marks of B or better (last 120 European credit points) within the fields of Li-ion batteries, electrochemistry, physical chemistry, materials, energy storage, instrumentation, or cybernetics.

Wanted experience

- Relevant master thesis topics
- Experimental investigation of energy systems
- Experience with Li-ion batteries
- Theoretical considerations and modelling, preferably in relation to experiments

Relevant skills and experience:

- Ability to work in team
- Ability to work independent
- Initiative approach
- Creative and solution oriented
- Experience in writing publications
- Track record in experimental laboratory work
- Experience with teaching

Conditions

PhD Candidates are remunerated in code 1017, and are normally remunerated at gross NOK 436 900 before tax. There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross wage.

Engagement as a PhD Candidate is done in accordance with "Regulation concerning terms and conditions of employment for the posts of post-doctoral research fellow, research fellow, research assistant and resident", given by the Ministry of Education and Research of 19.07.2010. The goal of the positions is to obtain a PhD degree. Applicants will engage in an organized PhD training program, and appointment requires approval of the applicants plan for a PhD study within three months from the date of commencement.

The position is of 3 years duration.

For further information about the position, please contact Prof. Odne Stokke Burheim, Department of Energy and Process Engineering, NTNU, Trondheim. Email: burheim@ntnu.no.

See <https://www.ntnu.edu/iv/doctoral-programme> for more information.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants. The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. Women are encouraged to apply.

The application

The application must contain information of educational background and work experience. Certified copies of transcripts and reference letters should be enclosed. Applications with CV, grade transcripts and other enclosures should be submitted via this webpage at www.jobbnorge.no.

Mark the application with IV-198/18.

Start-up date may be discussed, but as soon as possible.

Application deadline is 1. August 2018

According to the new Freedom of Information Act, information concerning the applicant may be made public even if the applicant has requested not to be included in the list of applicants.

Jobbnorge-ID: 154581, Søknadsfrist: Søknadsfristen er gått ut