

Jobbnorge-ID: 147172 Søknadsfrist: Avsluttet

Nettside: Omfang: Varighet:

# **Associate Professor in Electrical Machines**

The Faculty of Information Technology and Electrical Engineering (IE) (<a href="https://www.ntnu.edu/ie/">https://www.ntnu.edu/ie/</a>) at the Norwegian University of Science and Technology (NTNU) invites applications for a full-time associate professorship in Electrical Machines at the Department of Electric Power Engineering (IEL) (<a href="https://www.ntnu.edu/elkraft">https://www.ntnu.edu/elkraft</a>).

### Information about the Department

Currently there are 12 Professors, 7 Associate Professors and 4 Lecturers at the Department of Electric Power Engineering. In addition, there are 4 Adjunct Professors, 2 Adjunct Associate Professors, 9 Postdoctoral researchers, 2 Researchers, about 35 PhD students, and 15 technical/administrative staff.

Research activities are organized under two Research Groups: Power Systems Group and Power Technology Group. The department has a good laboratory infrastructure for research and education, as well as a mechanical workshop, supported by a technical staff of about 10 persons.

## Fields of research and teaching

The Associate Professor will have the responsibility for research and teaching within electrical machines' construction, function, and behavior in the power system. The candidate is expected to contribute to research in the application of electrical machines within renewable energy production, and motors within the transportation and marine sectors, in addition to machines for special applications; important areas are modelling, simulation, and experimental testing.

The position is presently attached to the Power Technology Research Group. The prospective candidate is expected to strengthen the research and educational activities of this Group in the above-mentioned fields of expertise; this is deemed vital for creating a scientific and technological basis for the realization of future electrical machines.

The Associate Professor will have the responsibility for teaching and further development of the Department's courses in electrical machines at the undergraduate level, including further development of existing laboratory course work and exercises, with a view to pedagogical excellence. In this connection, emphasis will be placed in the selection process on the prospective candidate's command of the Norwegian language (or any Scandinavian language).

## Responsibilities and duties

MSc and PhD candidates from the study programmes of the Faculty are expected to be competitive in the international job market. The Associate Professor will play a leading role in developing the educational profile in the field of electrical machines, and in ensuring an excellent learning environment, in collaboration with colleagues, students, and external stakeholders. The Faculty's study programmes are required to have a strong international profile, and as such the Associate Professor is expected to be able to contribute to the development of international alliances and collaboration. The Associate Professor is expected to teach relevant courses at all levels, and should supervise MSc and PhD students. Continuing education is included in the portfolio of educational activities of the Department; the Associate Professor is expected to contribute to these activities.

The research activities of the Department rely crucially on external funding, and the development of educational programmes may also receive external funding. The Associate Professor is expected to work actively to secure research grants and funds from the Research Council of Norway, Nordic and European research and educational agencies, relevant industry partners, and other available sources. NTNU places great importance in projects under the EU Framework Programmes for Research and Innovation, such as Horizon 2020. Thus, weightage in the selection process will be placed on experience in the acquisition and management of externally funded research projects.

Presently, the Department is heavily involved in the Norwegian Research Centre for Hydropower Technology (HydroCen, <a href="https://www.ntnu.edu/hydrocen">https://www.ntnu.edu/hydrocen</a>), which is a Centre for Environment-friendly Energy Research (FME), established by the Norwegian Research Council. The Associate Professor is expected to take a role in this Centre.

In addition to research and education, the Associate Professor is expected to be able to effectively disseminate relevant parts of her/his research to a wider audience.

The Associate Professor is expected to participate in the formal management of research, education, and other relevant areas of activity in agreement with the Head of Department.

The work place will be in Trondheim.

## Qualifications

Applicants must hold a PhD relevant for the specified fields of research and teaching. The applicant will primarily be evaluated on the basis of scholarly achievements and research potential, teaching experience and teaching potential, communication skills, and leadership potential, as well as motivation and personal suitability.

We refer to https://www.regjeringen.no/no/dokumenter/regulations-concerning-appointment-and-promotion-to-teaching-and-research-posts/id2519258/

The successful applicant must have a strong academic track record showing internationally competitive research, or demonstrate a clear potential to make a future international impact.

Documented teaching qualifications and experience will be considered a significant advantage. The applicant should demonstrate communication skills that qualify for excellent teaching, supervision, and dissemination.

Documented acquisition of external funding and experience with research leadership will be rated positively. A person employed in the category of Associate Professor will later have the possibility of applying for a full professorship.

#### Formal regulations

Academic staff employed without prior formal pedagogical qualifications in university-level teaching, are required to successfully complete a recognized course that gives the required pedagogical qualification within two years of appointment. NTNU offers such courses.

#### Language requirements

Proficiency in the English language should be documented. New members of the academic staff who do not already master a Scandinavian language are expected to achieve proficiency in Norwegian or another Scandinavian language within three years. This proficiency should correspond to level three in the Norwegian for Foreigners courses provided at the Department of Language and Literature at NTNU.

#### General:

We can offer:

- · an informal and friendly workplace with dedicated colleagues
- · academic challenges
- attractive schemes for home loans, insurance and pensions in the Norwegian Public Service Pension Fund

Diversity is important to achieve a good, inclusive working environment. We encourage all qualified applicants to apply, regardless of gender, disability, and cultural background. NTNU wishes to increase the number of women in its workforce, and women are specifically encouraged to apply.

The appointment is to be made in accordance with the regulations for State Employees and Civil Servants in Norway. The candidate must adhere to regulations that concern changes and developments within the discipline and/or the organizational changes concerning activities at NTNU.

Under Section 25 of the Freedom of Information Act, information about the applicant may be made public even if the applicant has requested not to have her/his name entered on the list of applicants.

Further details about the position can be obtained from Prof. Hans Kristian Høidalen, hans.hoidalen@ntnu.no or from the Head of Department, Prof. Ole-Morten Midtgård, ole-morten.midtgard@ntnu.no

## **Salary Conditions**

The position as Associate Professor follows code 1011, and is remunerated at gross NOK 490 900 to NOK 722 000 a year. 2% of the salary will be deducted as an obligatory premium to the Norwegian Public Service Pension Fund.

## Requirements for the application

Applications are to be submitted electronically through this page (<a href="http://www.jobbnorge.no">http://www.jobbnorge.no</a>). Preferably, all attachments should be combined into a single file.

The application should contain:

- · CV including information pertaining to the given qualifications and a full list of publications with bibliographical references
- · Testimonials and certificates
- The most important publications that are relevant for the evaluation of the applicant's qualifications (maximum 10 publications)
- A brief description of the scientific/technological relevance of the candidate's research
- A research proposal for the first few years of employment (maximum 5 pages)
- Information about the applicant's pedagogical qualifications; see http://www.ntnu.edu/vacancies/pedagogical-qualifications
- Information about dissemination activities
- · Other documents which the applicant would find relevant

The applications will be evaluated by an international expert committee. The evaluation will take into account not only the accumulated academic production, but also the candidate's potential for scientific development. Young researchers are therefore encouraged to apply. Short-listed applicants will be invited for interviews and trial lectures. Strategic considerations may be taken in the final selection of candidates.

Reference no: IE-014-2018.

Application deadline: March 9, 2018

## **Tilleggsinformasjon**

#### Arbeidssted: