

## **Postdoc in Protection and Power Electronic Control of Renewable Energy Systems, University of Southern Denmark, Denmark.**

SDU Electrical Engineering Section (SDU EE) invites applications for a position in Odense as Postdoc in Protection and Power Electronic Control of Renewable Energy Systems. SDU EE is part of the Mads Clausen Institute at the Faculty of Engineering, University of Southern Denmark. The position is available for a period of 2 years and is open for appointment from June 1st, 2019 or soon thereafter.

### **Job description**

The successful candidate will conduct research in the field of protection and control of power-electronic-interfaced distributed generation systems and renewable energies through both simulations and laboratory works. He or she is also expected to collaborate with building new lab setups and participate in attracting external research funding. Experience with fund-raising and industrial collaboration will be considered as merits.

Candidates must have experience and competences in most of the following fields:

- Plant and network protection especially for renewable energy systems
- Control of power electronics for applications such as wind turbines, photovoltaic systems, microgrids, HVDC, energy storage, etc.
- Simulation of power systems and power electronics using MATLAB/Simulink, PLECS DIgSILENT, etc.
- Hardware-in-the-loop (HIL) simulation and experimental implementation of power electronic systems using OPAL-RT, dSPACE, RTDS or similar tools.

We expect

Candidates must have

- PhD in electrical power engineering or power electronics
- documented experience with research dissemination in international scientific journals and conferences
- experience with industry collaboration and laboratory works
- team-working skills in addition to self-motivation and the ability to work independently
- good communication skills in English.

Further information about the position is available from Associate Prof. Mehdi Savaghebi (Tel: +45 +45 6550 3693, e-mail: [mesa@mci.sdu.dk](mailto:mesa@mci.sdu.dk)) or Vice-Head of Section, Associate Prof. Per Andersen (Tel: +45 6550 9573, e-mail: [pande@mci.sdu.dk](mailto:pande@mci.sdu.dk)).

## **Requirements for the position**

Employment as a postdoc requires scientific qualifications at PhD level.

Applications will be assessed by an expert. Applicants will be informed of their assessment by the Faculty.

Shortlisting may be used. Shortlisted applicants will be assessed by an assessment panel.

An interview might be part of the assessment process.

## **Conditions of employment**

Employment as a postdoc is a 2-year temporary position with research duties. The employment will cease without further notice at the end of the period.

Employment is governed by the Protocol on PhD Research Fellows signed by the Danish Ministry of Finance and the Danish Confederation of Professional Associations.

Research will be predominant in the position. Teaching assignments can be agreed individually. Furthermore, other types of assignments may occur to a limited degree.

The Faculty determines the distribution of the various assignments. The weighting of the different assignments may vary over time.

## **Application**

Your application must be uploaded through the link “Apply Online”. Attached files must be in Adobe PDF or Word format. Please read guidelines for applicants.

All pdf-files must be unlocked and allow binding and may not be password protected.

In case you have more than one file per field you need to combine the pdf-files into a single file, as each field handles only one file.

Each box can only contain a single file of max. 10 Mb.

The applications must include:

- A motivated text wherein the reasons for applying, qualifications in relation to the position, and intentions and visions for the position are stated.
- curriculum vitae.
- research plan.
- diplomas/certificates (Master and PhD degrees).
- documents of experience in industrial collaboration and laboratory tasks.
- scientific qualifications. A complete list of publications must be attached with an indication of the works the applicant wishes to be considered. You may attach up to 5 publications.

- dissemination qualifications, including participation in committees or boards, organisations and the like.
- references/recommendations.
- documentation of other qualifications with relevance to the position.

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background.

The application must be in English.