



AALBORG UNIVERSITY  
DENMARK

## PhD Position in Photovoltaic Systems

Within the Science without Borders programme, Aalborg University is offering a PhD position at the Department of Energy Technology, Pontoppidanstræde 101, DK-9220 Aalborg East.

The position is administrated by "Science without borders" and financed by stipends through CAPES. The overall theme is "Renewable Energy". Acceptance of employment is on condition of the grant from CAPES.

**Description:** The project will be run within the Photovoltaic Systems Research Programme ([www.pv-systems.et.aau.dk](http://www.pv-systems.et.aau.dk)) at the Department of Energy Technology ([www.et.aau.dk](http://www.et.aau.dk)), Aalborg University. The research group, beyond the support, guidance and supervision for the PhD candidate provides a stimulating research environment with fellow PhD students and professors, as well as access to world class laboratory facilities.

Photovoltaic is the fastest growing energy technology in the world today, with over 100GW installed capacity. The ageing and degradation of the panels affects the yield and financial return of the PV plant, therefore an accurate assessment of the age and health state of panels is essential. Characterisation and measurement techniques that can continuously monitor and assess the health state and remaining lifetime of PV panels will have an important positive effect on the Levelized Cost of Energy (LCOE) of PV plants.

The goal of the project is to develop new characterisation and measurement techniques that can accurately assess the health state and age of the panels while installed in the field.

A central part of the project will be the development of AC characterisation and impedance spectroscopy techniques for various types (c-Si, a-Si, CiGS, etc) of PV panels and strings, targeted at health state and ageing assessment.

**Requirements:** The ideal PhD candidate has an MSc degree in Electronic Engineering, with knowledge in measurement techniques and Electrical Impedance Spectroscopy (EIS).

Experience in characterisation and modelling of PV panels, as well as signal processing is an advantage

The candidate should have good written and oral communication skills in English.

**Contact person:** Associate Professor Dezso Sera, e-mail: [des@et.aau.dk](mailto:des@et.aau.dk)

**To apply please see the link below:**

<http://www.en.tek-nat.aau.dk/vacant+positions/Science+without+Borders/>