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16 January 2018

EPPEI Specialisation for Renewable Energy and Power System Simulation (SC-RE/PSS)
Centre for Renewable and Sustainable Energy Studies
Faculty of Engineering
Stellenbosch University

Postdoctoral Fellow Position

The EPPEI SC-RE/PSS has funding available for one postdoctoral fellow position. An appointment will be made for not less than twelve months and not more than two years.

Context

The Eskom Power Plant Engineering Institute (EPPEI) provides world-class training and research to improve the power plant industry.

EPPEI fosters a dynamic relationship between industry, academia, including universities and universities of technology and the postgraduate student to ensure that there is a balance between applied research that is relevant to industry and research that has academic merit.

EPPEI encourages the involvement of industry partners in research and innovation. Industrial partners interested in getting involved should contact the EPPEI consortium via any of the consortium partner universities or the consortium management team.

The EPPEI Specialisation Centre for Renewable Energy and Power System Simulation (SC-RE/PSS) is located within the Centre for Renewable and Sustainable Energy Studies (CRSES) at Stellenbosch University. This university has established itself as the most imminent university in South Africa in the area of renewable energy research, education and training.

Tasks

As a postdoctoral fellow the incumbent will assist the academics of the EPPEI SC-RE/PSS with specific research tasks/projects. An academic supervisor will be assigned who will develop the research project/s with the incumbent taking into consideration the individual's background and the research questions at hand. The postdoctoral fellow will be expected to write at least two full-length, peer-reviewed journal articles per year. Funding is available to attend at least one international conference provided a paper will be presented.



CENTRE FOR RENEWABLE &
SUSTAINABLE ENERGY STUDIES

The main areas of interest for this position are:

Flexibility on the future grid: How does conventional and Renewable Energy Systems (RES) generation plants impact flexible operation of the South African power system? How can flexibility requirements be captured accurately in system planning and system operations? What current and emerging flexibility support services opportunities are available on the South African and South African Power Pool grids, and at what cost?

Impact of Distributed Energy Resources on the network: How does the increasing penetration of distributed energy resources (DERs - Distributed Generation, Energy Storage and Demand Side Management) impact quality of supply, personnel and asset safety, financial viability, network planning, system planning and system operations? What current and emerging support services opportunities are available on the South African and South African Power Pool grids to mitigate the impact of DERs, and at what cost?

Requirements

- A PhD in engineering from a recognised academic university (must have graduated within the last five years), with a thesis/dissertation involving power system studies.
- Experience in conducting research at an advanced level in an engineering environment.
- Good network of international professional, research and training contacts.
- Very good command of the English language.
- At least two journal articles accepted for publication in a peer-reviewed journal.
- Sound knowledge and experience in power system studies.

Enquiries

Dr Bernard Bekker on +27 21 808 4041 or bbekker@sun.ac.za

Commencement of duties: As soon as possible, but not later than 1 March 2018.

Closing date: Open until filled.

Application procedure: Send a letter of application, accompanied by a comprehensive curriculum vitae, including a list of publications and the names and contact details of at least two referees, to crses@sun.ac.za

The University reserves the right not to make an appointment.

