



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

Research Fellow in Smart Microgrid Systems, Faculty of Engineering



**Salary: Grade 7 (£32,548 – £38,833 p.a.)** Due to funding limitations an appointment will not be made above £35,550 p.a.

**Reference: ENGEE1071**

**Closing date: 01 July 2018**

**Fixed-term for 24 months, available from 01 September 2018**

**We will consider flexible working arrangements**

# Research Fellow in Smart Microgrid Systems

## School of Electronic and Electrical Engineering

**Are you interested in sustainable, reliable, and resilient energy supply? Do you have the skills to contribute to the development of self-sustained and resilient energy distribution for developing countries?**

This is a unique opportunity to join an exciting consortium that seeks to address the technical and operational challenges in the development of low-cost, resilient, and reliable Microgrids in developing countries, such as Tanzania, Uganda and the Democratic Republic of the Congo. You will be conducting research, innovation and associated activities in the area of optimisation and advanced control techniques for distributed energy systems as part of the recently RCUK funded £1.5m 'CRESM-HYRES' project under the umbrella of the Global Challenges Research Fund (GCRF). GCRF is a £1.5 billion fund announced by the UK Government to support cutting-edge research that addresses the challenges faced by developing countries.

Holding a PhD (or close to completion) in Electrical Engineering, Control Engineering, or a closely allied discipline, you will have a strong background in advanced control and optimization with applications to electric power or energy systems.

### What does the role entail?

As a Research Fellow your main duties will include:

- Developing advanced distributed control and optimization algorithms for the electrification of rural areas in developing countries;
- Generating and pursuing independent and original research ideas in the area of control and optimisation of Microgrids and active distribution networks;
- Liaising with academics and research students across the partners in the 'CRESM-HYRES' project, in order to carry out, coordinate and manage the planned work-packages;
- Travelling to meet academic and industrial partners, collecting and analysing information related to technology innovation and knowledge transfer in this project and report accordingly;
- Developing research objectives and contributing to setting the direction of the project;



- Preparing papers for publication in leading international journals, independently writing reports, and communicating research results;
- Contributing to the preparation of proposals for funding;
- Acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

## What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or close to completion) in Electrical Engineering, Control Engineering, or a closely allied discipline;
- A strong background in advanced control and optimisation with applications to electric power or energy systems;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Good programming skills;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- Excellent written and verbal communication skills;
- A proven ability to work well both individually and as part of a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Hardware development experience for experimental validation;
- Research experience in computational intelligence (machine learning, data science, etc.).



## How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised [closing date](#).

## Contact information

To explore the post further or for any queries you may have, please contact:

**[Dr Petros Aristidou](#)**, Lecturer in Smart Energy Systems

Tel: +44 (0)113 343 2473

Email: [p.aristidou@leeds.ac.uk](mailto:p.aristidou@leeds.ac.uk)

## Additional information

### Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering](#) and the [School of Electronic and Electrical Engineering](#).

### A diverse workforce

The Faculty of Engineering is proud to have been awarded the [Athena Swan Silver Award](#) from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.

### Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

### Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at [disclosure@leeds.ac.uk](mailto:disclosure@leeds.ac.uk).



## Criminal record information

### Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

