UCLouvain

Postdoc position in power systems engineering and optimization

UCLouvain invites applications for a three-year postdoctoral research position in the fields of power systems engineering and optimization, starting in October 2026 or as soon as possible thereafter.

The position is in the context of the interdisciplinary ARC project CoFlex on coordinated flexibility in electricity systems funded by the Wallonia-Brussels Federation. It gathers researchers in operations research, power systems engineering and economics. The project aims to design and evaluate coordination schemes of inverter-based resources in distribution grids with high penetration of renewable resources and understand their interaction with emerging market design for flexibility. Altogether, the goal is to develop scalable and incentive compatible market designs that integrate network constraints and promote efficient use of flexibility at the distribution level.

Host institution and research environment

The position will be hosted jointly by two institutes of UCLouvain: the Institute of Mechanics, Materials and Civil Engineering (IMMC) and the Louvain Institute of Data Analysis and Modeling in Economics and Statistics (LIDAM). IMMC is one of the three research institutes of the school of engineering, focusing on a wide range of domains such as dynamical and electromechanical systems, energy, mechanics and computational engineering. LIDAM brings together researchers in economics, econometrics, statistics, and operations research. Both institutes offer an active research environment with regular seminars, workshops, and international collaborations.

Your tasks

The postdoctoral researcher will:

- Conduct independent and collaborative research across the fields of power systems engineering and mathematical optimization, under the supervision of the three PIs of the project: Emmanuel De Jaeger, Quentin Lété and Bert Willems.
- Develop original research questions and carry out theoretical and numerical analyses using suitable methods in engineering and operations research.
- Present research findings at international conferences and academic seminars.
- Lead research coordination tasks in the context of the ARC project (organizing reading groups, hosting visitors, maintaining contacts with stakeholders, …).
- Contribute, to a limited extent, to teaching, supervision or dissemination activities related to the project.

We offer

- Competitive salary with substantial functioning budget available.
- Active research environment in energy engineering and operations research with frequents seminars, reading groups, workshops and guest lectures.
- Interdisciplinary environment with frequent interactions with researchers in economics working on the project.
- Collaborations with industrial stakeholders (ORES, N-SIDE).

Required Qualifications

Applicants should have:

- A PhD degree in Electrical Engineering, Operations Research or a closely related field.
- Demonstrated interests in power systems and mathematical optimization.
- Experience with power systems simulation and control, optimization models in power systems.
- Interest in energy markets.
- Ability to work independently as well as collaboratively in an international research environment.
- Proficiency in English (written and spoken).

Application Procedure

Applications must be submitted in English as a single PDF file, named: Lastname_Firstname.pdf.

The application PDF should contain:

- Motivation letter (max. 1 page).
- Curriculum vitae (expected PhD completion date if applicable)
- Master's transcripts and degree certificates (if available)
- One writing sample (e.g. research paper)
- Names and contact details of up to two academic referees (letters of recommendation may be requested at a later stage)

Please submit your application through the following form:
https://forms.office.com/Pages/ResponsePage.aspx?id=1JCwei76z068fEEntNWC7Gj_2AGRWiBCnkdGsVZebfFUNklJRktMTU1UNkEySUYwWUw0NzU4SDRUNi4u

Applications received by 31 May 2026 will receive full consideration.

For more information about this position, please contact:
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