PSM Lab
EMI, Earthing & Corrosion

University of Cyprus
Department of Electrical and Computer Engineering

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Special Scientist (Post-Doctoral Research Fellow) in EMI, Earthing and Corrosion

Title: Special Scientist (Post-Doctoral Research Fellow)

No. of positions: Two (2)

Category: Employment Contract

Location: Power Systems Modeling (PSM) Lab, Department of Electrical and Computer Engineering, University of Cyprus, Nicosia, Cyprus

The PSM Lab of the Department of Electrical and Computer Engineering at the University of Cyprus announces two (2) Special Scientists (Post-Doctoral Research Fellows) positions for full-time employment based on a contract for 12 months that can be renewed based on performance. The successful candidates will **conduct research in various industrial and research projects that broadly concern electrical hazards on critical fuel-transport pipelines (e.g. oil & gas, hydrogen),** under the supervision of Associate Professor Charalambos A. Charalambous.

The PSM Lab team is composed of very active researchers in the fields of Electromagnetic Interference (EMI) assessments, earthing and dc/ac corrosion resulting from the operation of modern power systems. It has a strong track record of tackling complex projects awarded through competitive research grants' applications or assigned by utilities, oil & gas pipeline operators/owners, consulting firms and partners around the world. The team is also producing high quality research publications in top-class peer-reviewed scientific journals and conference proceedings.

Hence, the required skills and expertise for the available positions include one or more of the following areas:

- An advanced degree (Ph.D.) in Electrical Power Engineering, or in High Voltage Engineering or in Applied Mathematics with good understanding of power system plant and operation.
- Experience in conducting research on methods/approaches to assess the impact of dc/ac interference (resulting from the operation of modern power systems including RES, or HVDC networks or railways) on critical infrastructures and/or in power system earthing studies and/or lightning protection of critical infrastructure.
- Experience in using at least one high-level software for system modelling, mathematical programming for EMI assessments, earthing and soil structure analysis. (e.g. CDEGS, MATLAB, EMTP, ATP)
- Excellent research and writing skills; strong oral communications skills; ability to present complex problems in a clear and concise manner.

University of Cyprus

The University of Cyprus was officially founded in 1989 and started operating in Nicosia, the capital of Cyprus, in 1992. Within a short time, the University of Cyprus managed to achieve international recognition through an impressive course of development. Today, it is ranked 67th young university

(under 50 years) and #251-300 worldwide in Engineering and Technology by the Times New Higher Education Rankings.

These great distinctions are the result of its dedication to excellence and continuous development. The University of Cyprus managed to stand out and receive awards for the new paths it has opened up in particularly demanding and dynamic contexts of research. The University of Cyprus becomes better every year; therefore, it wishes to attract the best employees.

Job Details

Duties and Responsibilities

The successful candidates will be responsible to conduct fundamental and/or applied research in the fields of Electromagnetic Interference (EMI) assessments, earthing and dc/ac corrosion on third-party infrastructure resulting from the operation of modern power systems. Depending on their qualifications and expertise, the successful candidates will be responsible to prepare reports and project deliverables, contribute to the preparation of research proposals, and assist in the supervision of undergraduate students. Furthermore, the successful candidates are expected to publish their research results in top international conferences and journals.

Profile of the ideal candidate

The ideal candidates must be able to work independently and/or in a team in fundamental and/or applied research, typically in the context of research and/or industrial projects. The ideal candidates must be able to produce, publish, and present research results in high quality conferences and journals and/or engage in innovation activities and transfer of knowledge, be able to prepare reports and project deliverables, attend academic and/or other conferences and seminars for further personal and professional development, assist in the preparation of research and/or innovation proposals, present periodically the progress of their research, and assist in the training, education, and dissemination activities of the Department of Electrical and Computer Engineering.

Academic Qualifications

- Bachelor's or/and Master's Degree in Electrical Engineering or a related field from an accredited institution
- Doctorate degree or equivalent in Electrical Power Engineering, or in High Voltage Engineering or in Applied Mathematics with good understanding of power system plant and operation.

Employment Terms

Each position is on a contract basis for 12 months that can be renewed based on performance and available funding. The monthly gross salary is up to €2700 depending on the qualifications and experience of the successful candidate. The 13th salary bonus is incorporated in the monthly salary. Maternity leave will be granted based on Social Insurance Laws from 1980 until 2012. Travel allowance strictly for the purposes of the project will also be provided.
Note: For exceptional candidates with established professional records, *remote work* can be also considered for a certain period of the contract.

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Application

Interested candidates should submit the following items **both to** psmlab@ucy.ac.cy **and** cchara@ucy.ac.cy

- Cover letter that specifies their employment availability date
- Short description of their academic and research experiences (can be combined with the cover letter) (1-page maximum)
- A detailed curriculum vitae in English or in Greek
- Copies of transcripts of BSc/MSc/PhD degree(s)
- The names and contact information of at least two academics from whom references may be requested

The applications should be submitted as soon as possible, but not later than **Thursday, 22 December 2022, at 5pm**. The evaluation of the applications will begin immediately until a suitable profile is found.

For more information, please contact Dr. Charalambos A. Charalambous (cchara@ucy.ac.cy).

At least the best three candidates that satisfy the required qualifications, will be interviewed by a 3-member Committee.

Candidates shall be informed of the result of their application by the relevant entity.

The University of Cyprus shall collect and process your personal data according to the provisions of the General Regulation on Personal Data 2016/679 (EU).

The University of Cyprus (UCY) is committed to promoting inclusivity, diversity, and equality, as well as the elimination of all forms of discrimination in order to provide a fair, safe, and pleasant environment for the entire university community, where students and staff members will feel supported both in their professional and personal development, within and beyond their multiple identities. To this end, UCY seeks to create the necessary conditions that will encourage and respect diversity, and ensure dignity both in the workplace and society at large. Moreover, UCY has adopted specific policies to promote equal opportunities, as well as respect and understanding of diversity, while it is committed to promoting and maintaining a working, teaching, and learning environment, free from any form of discrimination, whether direct or indirect.