Associate Research Scientist for Concentrated Solar Power

Reference No: EEWRC_ARSCSP_17_09

Closing date: 27th October 2017

The Cyprus Institute (CyI) is a European non-profit science and technology institution based in Cyprus and led by an acclaimed Board of Trustees. The research aims of the CyI are represented by three research centers: the Computation-based Science and Technology Research Center (CASTORC), the Science and Technology in Archaeology Research Center (STARC), and the Energy Environment Water Research Center (EEWRC). Considerable cross-center interaction is a characteristic of the Institute's culture.

The CyI invites applications for the position of Associate Research Scientist for Concentrated Solar Power. The successful candidate(s) will be actively engaged with the on-going research at the Cyprus Institute in Concentrating Solar Thermal (CST) technologies. They will be part of the research team associated with the European Research Area (ERA) Chair in Solar Thermal Technologies for the Eastern Mediterranean (CySTEM). As stated by the European Commission, "the ERA Chairs is an important part of the EU's effort to unlock Europe's potential in research and innovation." The holder of CySTEM ERA Chair is Prof. Manuel J. Blanco, who is currently also the Chair of SolarPACES, the International Energy Agency's Technology Collaboration Program for CST related technologies.

Prof. Blanco is a leading researcher in the CST field, with more than 30 years of research and management experience. The appointment(s) will initially be for a fixed term period of 2 to 3 years, with the option of renewal depending on performance and funding. The annual salary is to be internationally competitive. In addition to the salary, the successful candidate(s) will have a career development plan tailored to their specific circumstances, interests, experience and skills, which may include training at the CyI, secondments at prestigious research institutions around the world and participation in international conferences and events. In addition, since the Cyprus Institute is not just a research centre but also an educational institution offering PhD programs, the appointees will have the opportunity to co-supervise doctoral students. Both, the initial fixed term period (2 or 3 years) and the annual salary will depend on the applicants' experience and qualifications.

Responsibilities

The successful candidate's main responsibilities will be as follows:

- Development and adaptation of scientific computing software in C++, Modelica, Mathematica and other computer languages for the simulation, design and optimization of advanced solar concentrators concepts, of solar receivers and other Concentrating Solar Themal (CST) technology components, as well as for simulation, design and optimization of overall CST system concepts.

- Development and adaptation of scientific computing software in C++, Modelica, Mathematica and other computer languages to assist in the testing and characterization of CST components and systems.
- Working with sensors, data analysis and modelling tools and participate in the designing of testing campaigns and other experiments to experimentally evaluate CST components prototypes and use the results obtained to advance their technological design.
- Other general modelling, optimization and design of CSP systems and/or Techno-Economic studies

Required Qualifications

- A PhD in a relevant field of Science or Engineering
- An educational background in one of the following fields:
    - Mechanical engineering
    - Chemical Engineering, Process Engineering
    - Electrical engineering
    - Experimental physics
- At least 4 years' postdoctoral or research experience in a relevant field
- At least 3 publications in a relevant field, of which at least 2 peer-reviewed scientific journals
- Proven experience in the development of scientific computing software
- Proficiency in spoken and written English is essential
- High level of organizational, analytical and problem solving skills
- High level of communication and interpersonal skills and the ability to adopt to a multicultural/multinational environment

Specialised experience in one or more of the following fields would be an asset:

- Scientific computing Modelling of physical systems.
- Computational and experimental thermodynamics, or heat transfer, or fluid-mechanics
- Solar-Thermal plants, Concentrating Solar Power, co-generation of concentrated solar power and desalination

Application

For full consideration, interested applicants should process their application at The Cyprus Institute JobBoard (http://jobboard.cyi.ac.cy/) based on the instructions given. Applicants should submit: (i) a curriculum vitae including a list of publications (ii) a vision statement and (iii) a list of four references (including contact information). For further information please contact Mr George Kirkos (g.kirkos@cyi.ac.cy). Recruitment will continue until the position is filled.