

Thermal Science Researcher (s)

Reference No: EEWRC_TSR_17_10

Closing date: 26 January 2018

The Cyprus Institute (Cyl) 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 Cyl 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.

Description of the Position

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 in by the European Commission in its website, "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 Vice-Chair of [SolarPACES](#), the International Energy Agency's Technology Collaboration Program for CST related technologies.

The appointment(s) will be at the Post-Doctoral Fellow and/or Associate Research Scientist rank depending upon qualifications, and experience. The initial period of the appointment will be for a duration of 2.5 years, with the option of renewal subjected to the needs of the Cyprus Institute and the availability of funding. In the case of Post-Doctoral appointments, the total duration of appointment at the Institute cannot exceed 4 years. The annual salary is to be internationally competitive and is between 30,000 Euros and 45,000 Euros depending on the rank of appointment and experience level of the selected candidate(s). In addition to the salary, each researcher will have a career development plan tailored to her or his specific circumstances, interests, experience and skills, which will include training at Cyl, secondments at prestigious research institutions around the world and participation in international conferences and events. In addition, the researcher will have the opportunity to assist in the supervision of doctoral students that study at the Cyl's Graduate School.

Responsibilities

The successful candidate will be responsible for helping to shape and advance the Cyprus Institute's and EEWRC's research agenda and specially the development of the CySTEM ERA Chair Scientific Work

Programme. According to his/her qualifications the selected candidates will be required to carry out, under the supervision of the ERA Chair, activities related to:

- The modeling, analysis, design and optimization of new thermal components of CST Systems i.e. receiver, thermal storage, heat exchangers etc.
- The modeling, analysis, design and optimization of overall CST Systems configurations.
- The drafting of journal papers, presentations etc.
- The contribution to technical deliverables and other technical documents.
- Any other activities in support of the research activities of the Energy Division aligned with the general expectations regarding the expertise and capabilities of successful candidates to these positions.

Required Qualifications

- A PhD degree in a relevant field of science or engineering
- An educational background in one of the following or similar fields:
 - Mechanical engineering
 - Energy Engineering
 - Chemical Engineering,
 - Process Engineering
 - Thermal Science Scientist
 - Experimental Physicists
 - Experimental Chemist
- Specialised experience in one or more of the following fields is required
 - Thermodynamics
 - Fluid-mechanics
 - Heat Transfer
 - Good knowledge of simulation techniques to simulate Energy Systems, or at least, to simulate in detail, physical systems in general.
- The following expertise is not essential but could be considered an advantage:
 - Concentrating Solar Thermal systems
 - Thermal storage
 - Polygeneration and desalination
 - High temperature engineering
 - Control systems
 - C++,
 - Wolfram's Mathematica
 - Modelica language

Note: *The candidates might be asked to be tested about their knowledge on some of the above topics*

Other Requirements:

- Publications in relevant fields
- Proficiency in spoken and written English is essential. Knowledge of the Greek language will be considered an advantage.

- High level of communication and interpersonal skills and the ability to adopt to a multicultural/multinational environment
- High level of organizational, analytical and problem solving skills

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 letter of interest and a list of three references (including contact information). For further information, please contact Prof Manuel J. Blanco (m.blanco@cyi.ac.cy). Recruitment will continue until the position is filled.

Reference letters: 3

Contact person: Prof Manuel J. Blanco

Reference number: EEWRC_TSRA_17_12