

## POSTDOCTORAL RESEARCHERS POSITION IN SERC-CHILE 2015

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### DESCRIPTION

SERC-Chile is a Center of Excellence in Solar Energy Research created in 2012 by a consortium of six Chilean Universities: Universidad de Chile, Universidad de Tarapacá, Universidad de Antofagasta, Universidad Técnica Federico Santa María, Universidad Adolfo Ibañez, Universidad de Concepción and Fundación Chile, and funded by the Chilean Government.

The Center aims to be a world leader in research on solar energy technology and its applications, with a particular emphasis on developing the potential of the Atacama Desert, one of the world's prime locations for the study and application of solar power. Our goal is to build a solid base of scientific knowledge related to this energy source. By exploiting the exceptional solar conditions, we carry out scientific research into the technical and economic challenges of solar energy that will have global as well as local impact (more details on [www.sercchile.cl](http://www.sercchile.cl)).

### CONTENTS

SERC Chile is now accepting two postdoctoral researchers for the following Research Lines:

- 1) **Solar Energy in Industry/Mining.** Will conduct research to enable a cost-effective increase of solar thermal and photovoltaic energy penetration into industrial processes, with particular focus into mining, chemical and agricultural sectors. The full time research position is to be based at the Universidad Técnica Federico Santa María, in Valparaíso city under the guidelines of Prof. PhD Samir Kouro.
- 2) **Electric Power Systems with High Penetration of Solar Energy.** Will cover issues of supply, quality, power interfaces, and network operation and expansion planning methods for electric system with high solar energy penetration. Responsible for this research line is Professor PhD Luis Morán from Universidad de Concepción. The full time research position can be based at any university of the consortium.
- 3) **Solar Energy Coordination Systems for Urban and Rural Communities.** Will research possibilities for cost-effective exploitation of existing solar power potential and propose models for the active participation of local communities. The full time research position is to be based at the Universidad de Chile, in Santiago city under the guidelines of Prof. PhD Rodrigo Palma-Behnke.
- 4) **Solar Energy Storage.** Will investigate storage of solar energy through sensible or latent heat storage using salts and other compounds, generation of hydrogen, and optimization of storage systems. The full time research position is to be based at the Universidad de Antofagasta, in Antofagasta city under the guidelines of Prof. PhD Hector Galleguillos.

- 5) **Solar Water Treatment.** Will research methods of decontamination and disinfection of natural water, treatment of industrial wastewater and solar desalination of sea and brackish water. Will also work on deepening the characterization of solar radiation in the Atacama Desert. The full time research position is to be based at the Universidad de Tarapacá, in Arica city under the guidelines of Prof. PhD Lorena Cornejo.
- 6) **Economic/Social/Regulatory Issues for Solar Development.** Will address barriers to solar technologies and the challenges raised by the other research lines. Priority will be given to applicants holding a Ph.D. in Economics with expertise in Energy Economics and/or Environmental and Natural Resource Economics. The full time research position is to be based at the Universidad Adolfo Ibañez, in Santiago city under the guidelines of Prof. PhD Claudio Agostini.

Both postdoctoral positions offered are best suited for graduated PhDs interested in any of the already mentioned research lines and willing to live and work in Chile. Furthermore, the positions will entail collaborative work among SERC's research lines and other centers, and the production of visible and high quality scientific results.

SERC-Chile offers a competitive salary, depending on the experience and productivity record of the applicants. Applicants selected from foreign countries will get a stipend to cover moving costs and should be able to start working by late September 2015.

## HOW TO APPLY

Please submit your application to e-mail: [catalina.terra@sercchile.cl](mailto:catalina.terra@sercchile.cl) cc: [contacto@sercchile.cl](mailto:contacto@sercchile.cl) subject "POSTDOCTORAL POSITION – SERC CHILE".

The application should include a short motivation letter, curriculum vitae, three references, a list of refereed publications and a one-page generic plan combining the applicant's postdoctoral experience with proposed experimental efforts related to the topics mentioned previously.

The deadline for applications is June 16<sup>th</sup> 2015.

For further information please contact the Director for SERC Chile, Prof. PhD. Rodrigo Palma e-mail: [rodrigo.palma@sercchile.cl](mailto:rodrigo.palma@sercchile.cl) or Catalina Terra e-mail: [catalina.terra@sercchile.cl](mailto:catalina.terra@sercchile.cl)