

## New Call for Postdoctoral Fellow Positions 2024

The Solar Energy Research Center (SERC Chile) was created in 2012 by the Chilean Government as a center of excellence on solar energy research. The Center is a consortium integrated by six Chilean Universities (Universidad de Antofagasta, Universidad Técnica Federico Santa María, Universidad Adolfo Ibáñez, Universidad de Chile, Pontificia Universidad Católica de Chile, and Universidad de Concepción) and Fraunhofer Chile, and hosts about 80 researchers, students, and staff. The Center aims to be a leader in basic and applied research on solar energy technology and applications, with a particular emphasis on developing the solar potential of Chilean Atacama Desert, one of the prime locations in the world for the study and development of solar energy. To promote collaborative research and increase impact, SERC Chile has defined four strategic research focuses:

1. Massive integration of large-scale solar energy to the electric interconnected systems
2. Solar energy-based industry in Chile
3. Development and widespread adoption of small-scale solar solutions
4. Optimization and characterization of materials and solar resource under local conditions

SERC Chile has opened one Postdoctoral Fellow Positions for the following research line:

**Research Line 3 Material science and solar resource assessment:** The general objective of this line of research is to characterize the conditions of the environment and solar resources, and to study how they affect the material used in solar technologies (soiling, corrosion and aging). The objective is to promote the processing and characterization of materials for the development of solar cells and modules adapted to extreme conditions. It also focuses on obtaining, characterizing and optimizing materials for energy storage (thermal, electrochemical and thermochemical). Line RL3 generates research that contributes to SERCCHILE's strategic focuses, such as: a) characterizing solar radiation and atmospheric parameters to study how these conditions affect the materials involved in solar technologies, b) investigating new materials suited to local conditions to improve the performance of solar technologies, latent heat storage systems, electrochemical storage and hydrogen transport. c) optimize thermal storage materials for application in mining processes, and d) evaluate alternatives for the sustainable decommissioning of large-scale photovoltaic plants in relation to the final disposal of the equipment of these plants.

### Relevant information

- Applicants must be in possession of a PhD or Doctoral degree to start at this position.
- The postdoctoral fellowships positions are held up to December, 2025.
- Required documents should be provided in Spanish or English language in a single PDF file.
- They must have residency permission in Chile at the time of application.
- Selected applicants are expected to produce high-quality scientific results (publications, research grants, projects with industry, research networks).
- Application deadline is **December 08<sup>th</sup>, 2024**.
- Applications should be sent to [dpando@centroenergia.cl](mailto:dpando@centroenergia.cl) and [rodpalma@cec.uchile.cl](mailto:rodpalma@cec.uchile.cl) with the following subject: "SERC POSTDOCTORAL APPLICATION 2024".
- The offered gross monthly salary is 2.3 million Chilean pesos.



### Required Documents

1. Statement of purpose explaining your interest in becoming part of SERC Chile. Applicants should also indicate research topics addressed during the last 2 years and mention results obtained (papers, conferences, patents). Please, clearly state the research line/s you are interested applying to.
2. Updated Curriculum Vitae including a list of publications. Please indicate whether these are conference articles or indexed publications.
3. Documentation attesting possession of a PhD or Doctoral degree.
4. Contact details of at least two references that may be contacted by SERC to provide a reference letter on your behalf.

Applications and further enquiries can be sent to [dpando@centroenergia.cl](mailto:dpando@centroenergia.cl) and [rodpalma@cec.uchile.cl](mailto:rodpalma@cec.uchile.cl).