

The Fraunhofer Research Foundation offers a new position at its Center in Chile:

For our research division "Solar Thermal Systems" we are looking for:

Senior Researcher or PostDoc in Thermal Energy Transfer and Storage Fraunhofer Chile Research - Center for Solar Energy Technology (CSET), Santiago, Chile

What we expect from you

You have successfully completed a degree (Master or PhD) in physics, chemistry or engineering in the field of Thermal Energy Transfer and Storage. Within the field, you have a thorough experience in system design and modelling as well as knowledge in material properties and science. Knowledge in solar energy, especially Concentrating Solar Power (CSP), will also be an asset.

Your strengths include the ability to work cooperatively and also to guide scientifically a team of engineers and students in an international environment, develop own initiative and work with a high level of commitment. Therefore, you should have creativity and flexibility in combination with analytical, organizational and communication skills. You are enthusiastic about applied research, renewable energies and are interested in working in an interdisciplinary team. The working languages are Spanish and English.

Your responsibilities will be

Advancing the knowledge on performance of thermal storage and its potential development in the solar energy applications in Chile. Your main – but not exclusive - topics of investigation will include

- 1) Investigation and optimization of innovative technologies and materials
- 2) Optimization of systems coupled to solar thermal applications
- 3) Analysis of materials available locally (ie. Chile) to store thermal energy

In these tasks, your result should allow the Center to develop economical and applied solutions to practical challenges of Chilean industry. There is a strong interaction within the teams in our Center, especially in the topics of CSP and Solar Heat for Industrial Processes. Therefore with your experience, you will be asked to advise other members of our team.

Your tasks will be the followings:

- Development of R&D activities supporting the development of advanced and more costeffective thermal storage systems adapted to Chilean environment and writing publications
- Research activities on prototypes and pilot plants: study of system behavior, analysis of costs, corrosion, etc.
- Cooperation with CDEA in Antofagasta
- Management and supervision of installation of prototypes and simulations
- Preparation of proposals and offers for national and international collaboration
- Contact to potential customers and companies
- Managing public and private projects, project reporting for industrial and public projects



- Assessment of the economic viability of potential solutions
- Technological watch over commercial products and new developments
- Further Development of the expertise at the center: training of other members, proposal of investigation projects
- Guidance and supervision of students

What you can expect from us

Fraunhofer is giving you an exciting work environment bridging the areas of applied research and industrial demand. We are focusing on providing innovative and high-quality solutions and advanced research services in order to support Chile's development towards a solar economy. You will work in a motivated and excellent team in the Angelini Innovation Center on Campus San Joaquin of the Catholic University. You will have contact to our international partners, especially to colleagues in Fraunhofer ISE, Germany, and to cooperating research groups in Chile.

The research efforts of Fraunhofer are geared entirely towards people's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers has a significant impact on people's lives. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas.

Starting date: January 2019

Apply at:

Fraunhofer Chile Research FCR-CSET,

Centro de Innovacion UC Anacleto Angelini, Piso 3, Vicuña Mackenna 4860, Macul, Santiago, Chile, Blas Diaz, E-Mail: <u>blas.diaz@fraunhofer.cl</u> with the subject "Thermal EnergyTransfer Expert"