

The Fraunhofer Research Foundation offers a new position at its Center in Chile, for our research division "PV Systems" we are looking for a

# "Expert of Photovoltaic" Fraunhofer Chile Research - Center for Solar Energy Technology (CSET), Santiago, Chile

## Job description:

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.

#### **Position requirements**

#### **Education:**

Physicist, Electrical Engineer. Postdoc or Senior Researcher in Photovoltaic technology, modules and systems.

#### Work experience:

You have successfully completed a degree (preferably PhD) in physics or engineering in the field of PV module technology and/or PV systems. Within the field of PV (or CPV) you have a thorough experience in experimental characterization and quality assessment as well as some knowledge of material properties, system design and simulation. Knowledge in soiling mechanisms will also be an asset.

#### **Competences:**

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.

#### **Responsibilities:**

Advancing the knowledge on performance of PV/CPV modules and systems under real conditions in Chile with climatic extremes (mainly Atacama Desert). Your main – but not exclusive - topics of investigation will include:

- Analysis of soiling impact on performance, and study of optimization solutions,
- Investigation and optimization of innovative technologies, such as bifacial modules
- Optimization of PV systems for Chilean applications

In these tasks, your result should allow the Center to develop economical and applied solutions to practical problems. There is a strong interaction within the teams in our Center, especially in the topics of quality assessment and monitoring, system simulation and integration of systems.

Therefore with your experience, you will be asked to advise other members of our team.

- Development of R&D activities supporting the development of advanced and more costeffective PV/CPV systems adapted to Chilean environment.
- Development of Scientific Publications according to CSET topics of investigation.
- Research activities on outdoor prototypes and pilot plants: study of system behavior, analysis of LCOE, etc.
- Cooperation Plataforma Solar del Desierto de Atacama in Antofagasta
- Management and supervision of installation of prototype (bifacial, CPV, heterojunction modules,...) photovoltaic systems
- 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 PV/CPV expertise at the center: training of other members, proposal of investigation projects
- Guidance and supervision of students

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: August 1, 2018 or later

## Apply at:

Fraunhofer Chile Research FCR-CSET,

Centro de Innovación UC Anacleto Angelini, Piso 3, Vicuña Mackenna 4860, Macul, Santiago, Chile, Prof. Dr. Frank Dinter, E-Mail: frank.dinter@fraunhofer.cl