



# Open PhD position

## Vehicle integrated photovoltaics

Instituto de Energía Solar Instruments and Systems Integration Group



[www.ies.upm.es](http://www.ies.upm.es)

The Instruments and Systems Integration group of the Solar Energy Institute is looking for a highly motivated PhD candidate to join a research project on developing vehicle-integrated photovoltaic technologies (VIPV), key to combating climate change.

### SCOPE

The project seeks to transform the transportation sector by developing lightweight, curved, and efficient photovoltaic modules adapted for integration into electric vehicles. The project addresses technical and design challenges to achieve scalable, automatable, and competitive solutions.

Specific objectives:

- Development of VIPV modules with polymers and metal substrates
- Manufacturing of curved prototypes
- Optical, electrical and mechanical characterization
- Advanced modeling for design optimization
- Contact with industry for technology transfer

### REQUIREMENTS

- Master's degree in mechanical engineering, materials, electronics or related fields
- Knowledge (or willingness to learn) in photovoltaics, materials characterization, and simulation
- Finite element simulation
- Good level of English (oral and written) and ability to work in a team and communicate scientifically
- Someone who enjoys working in a team environment and communicating

### CONDITIONS AND APPLICATION

The contract is offered under the Spanish national FPI grant, with a typical duration of 4 years, open to extensions. A pre-contract may be offered depending on candidate's availability. Candidates are selected exclusively on merit and potential. Interested candidates should send their **CV**, **motivation letter** and academic transcripts to Dr. Rubén Núñez at [ruben.nunez@upm.es](mailto:ruben.nunez@upm.es)

