



University  
of Cyprus

**AIT**  
AUSTRIAN INSTITUTE  
OF TECHNOLOGY  
TOMORROW TODAY



# SUMMER SCHOOL

**PHOTOVOLTAIC FUNDAMENTALS**  
**TwinPV - Summer school of PV**  
**performance**

August 20-24, 2018  
AIT Austrian Institute of Technology  
Giefinggasse 2, 1210 Vienna



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## TwinPV: Stimulating scientific excellence through twinning in the quest for sustainable energy

*“The TwinPV Team has expertise in PV performance, degradation, fault detection, high grid integration, and smart technologies.”*

If you want to share this experience, please

**Apply until:** June 30<sup>th</sup>, 2018

by sending an e-mail to:

[Marcus.Rennhofer@ait.ac.at](mailto:Marcus.Rennhofer@ait.ac.at)

Comprising the following information:

- Your personal data and field of studies
- Previous education
- Status of your curriculum
- What are your reasons for coming?

The participation is free of charge.



TwinPV aims to enhance the research field of photovoltaics (PV) and grid integration in smart grids at the University of Cyprus (UCY) through linking with the world renowned Austrian Institute of Technology (AIT) and Technical University of Denmark (DTU). The consortium has significant expertise in the entire life cycle of PV from cells, to modules to integration.

### COURSE OBJECTIVES

Photovoltaics (PV) convert sunlight into electricity and play an increasingly important role in the quest for alternative to fossil fuels. One of the major advantages of PV compared to other renewable sources is their scalability, i.e. PV can be used to power anything ranging from small electronics (calculators, watches etc.), to single residences, to buildings and to entire cities.

The specific objectives of the course are to teach and provide the necessary hands on knowledge in the following aspects:

- PV fundamentals including PV materials and technologies
- Technical characteristics of PV components and systems such as power systems and PV inverters
- Performance of PV systems as part of the built environment
- Environmental considerations such as solar irradiance
- Monitoring and data analysis of PV performance
- Optical characterization methods of PV modules
- PV power plants and operation



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