
Third call for papers

Special Session on

Innovative Modelling and Simulation Approaches for new technologies in Photovoltaic Systems

SS2 at ELECTRIMACS 2019

Special session organizers

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Special session theme

Modelling and simulation play an important role in the analysis and design stages of PV systems. Feasibility study and project development rely on energy yield simulations, that in turns require proper PV system modelling together with fast and accurate simulation tools. This Special Session is intended for papers that present innovative analytical and computers solutions to model, identify and simulate either the full PV system or its components, such as PV modules and/or the power converters connected to it. Different solar technologies as Si-PV and Organic solar cells are in the focus of this call. In the same way, modelling, simulation and experimental results about monofacial and bifacial PV systems are of interest. Different types of simulation techniques are appropriated for this call, which include (but is not limited to) pure simulation techniques, both Offline and Real-Time, as well as hardware in the loop simulation methodologies (HIL, PHIL, CHIL and Rapid Prototyping). Moreover, validation studies of different PV solar cells and modules models are relevant for this Special Session.

Topics of interest

- Optical, electrical and thermal modelling of PV systems
- Multi-scale and multi-physics models of PV systems' components
- Simulation tools to design and analyse PV systems
- Off-line simulation of PV systems
- Real-Time simulation of PV systems
- HIL, PHIL and CHIL simulation of PV systems
- PV Model Validation

- Identification of PV modules and systems parameters aiming at faster and/or more accurate simulation

IMPORTANT DATES ([see updates on ELECTRIMACS 2019 website](#))

The submission system is open!

Deadline for special session papers (extended)	23rd December 2018
Notification of acceptance	1st March 2019
Final paper submission and registration	1st April 2019

ELECTRIMACS 2019 PUBLICATIONS ([see updates on ELECTRIMACS 2019 website](#))

- a **special issue of MATCOM**–Transactions of IMACS Mathematics and Computers in Simulation (Elsevier journal, SCOPUS and WOS indexed);
- a **Springer book in the series *Lecture Notes in Electrical Engineering***. Each paper, appearing as a book chapter, will be also online available (with DOI). The book will be sent for indexing to the major scientific databases, such as Scopus and WoS.