

EEE-AM 2023 Special Session 06

TITLE

Special session: NEST - SOLAR PV, CSP & CST

SESSION CHAIR

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DESCRIPTION

The Nest- Network for Energy Sustainable Technologies project, Spoke 1 focuses on topics useful to boost the PV and CSP/CTS sectors toward higher amount of renewable energy production at competitive costs, overtaking the actual limits and introducing innovation at low technology readiness level. The project promotes a considerable pipeline of new and advanced versions of existing technologies unlocking the obstacles from lab to fab production, enabling robust continued performance increase, developing new applications and facilitating further cost reduction, improving the eco- profiles of materials, technologies and systems within the PV, CSP and CST fields, by supporting local companies to develop and sell differentiated and high value products helpful to create local jobs. The general framework of the activities is characterized by cross-cutting issues applying a sustainable horizontal integration between different topics and an eco-design approach for decarbonizing materials, systems and technologies.

The proposed special session covers these following topics:

- Technologies for innovative high performance solar cells and PV module,
- Innovative solar cell architectures for high conversion efficiency,
- Advanced technologies and solution for BIPV and BAPV,
- New concept for CSP/CST systems,
- Structural components and subsystems for high-efficiency solar systems
- Eco-design of materials, systems, and technologies