



Call for Abstracts

Area 9: PV Modules and Terrestrial Systems

On behalf of the Technical Program Committee, I invite you to submit an abstract on your latest results in photovoltaic module research, system development, and photovoltaic applications to Area 9: **"PV Modules and Terrestrial Systems"** of the **35th IEEE Photovoltaic Specialists Conference**, which will be held in **Honolulu, Hawaii**, from **June 20th-25th in 2010**. The IEEE PVSC meeting is the established international platform for presenting PV related research of high scientific level.

Area 9 is divided into the following five subareas:

Subarea 9.1: Markets and Customers

Subarea 9.2: PV Module Materials, Encapsulation and Manufacturing

Subarea 9.3: Inverters and other BOS Components

Subarea 9.4: Grid Connected Systems and Building Integration

Subarea 9.5: Stand Alone Applications

PV modules are a vital commodity in the market of PV systems. We encourage submissions in all subjects associated with PV module materials, manufacturing and the performance of PV modules. Papers on PV modules for Area 9 can cover all PV technologies: such as, thin film, crystalline silicon, organic PV and low concentrator modules. Papers on the development of new or improved materials for the encapsulation of PV cells are welcomed, as are papers about experience with the quality of PV module materials during the lifespan of PV modules. Moreover, papers reporting on the energy yield of PV modules in relation to meteorological conditions are encouraged.

For both PV modules and PV systems, papers about markets, financing and costs, taking into account customers and regulatory frameworks, are highly welcomed.

Power conditioning equipment affects crucial performance factors of PV systems such as their reliability and efficiency. Therefore, contributions describing technical issues and standardization of inverters and other Balance-of-Systems (BOS) components are encouraged. Papers about the design, performance analysis and reliability of inverters, DC/DC converters and maximum power point (MPP) trackers, as



well as developments regarding micro-inverters and power optimizers for improving shading tolerance of PV systems, are welcomed.

Regarding grid-connected PV systems, we encourage abstracts about design engineering, monitoring and control of very large scale grid-connected PV installations, concentrator systems, residential grid-connected systems and building-integrated PV systems. In particular, papers about incentives for and experiences with these systems in the framework of markets and customers are welcomed. Regarding building-integrated PV systems we are highly interested in experiences with the realization of projects by stakeholders from the building and construction sector. Papers about smart grids comprising PV systems, especially contributions about information and communication technology applied in smart grids and the performance of smart grids, are welcomed as well.

The growing need for autonomous electricity supply is advancing the development of stand-alone PV solutions and integrated power systems with PV technology for a variety of applications, for instance, consumer products, building components, vehicles, lighting systems, robotics and emergency backup. We welcome contributions describing sizing and simulation of system-integrated PV systems in the context of functionality, regulations, costs and environmental aspects. Here we would like to emphasize that papers on stand-alone applications can cover both hybrid systems and mini-grids.

For all terrestrial PV systems we encourage contributions describing energy performance analysis, the simulation of irradiance and system performance, energy rating and testing of their components under both standardized and operational conditions. Papers about product development and prototyping are encouraged as well. In Area 9, contributions can range from applied research and technology development, to papers about design, engineering, markets and user studies.

Please check our website for the 35th IEEE PVSC at www.ieee-pvsc.org. Extended abstracts of 3 pages in length need to be submitted before the deadline on February 15, 2010, on the conference website.

Please join us in making the 35th PVSC a great event to learn more about and to discuss the latest advances in PV modules and terrestrial systems!

Sincerely Yours,

Angèle Reinders, *University of Twente, The Netherlands*
Area 9 Chair

Terry Jester, *Hudson Clean Energy Partners, USA*
Pierre Verlinden, *Solar Systems Pty Ltd, Australia*
Area 9 International Co-Chairs

