



אוניברסיטת בן-גוריון בנגב
Ben-Gurion University
of the Negev

Jacob Blaustein Institutes for Desert Research

**SEVENTEENTH SEDE BOQER SYMPOSIUM
ON SOLAR ELECTRICITY PRODUCTION**

and

Smart Grid Workshop*

OCTOBER 24 – 26, 2011

Second Announcement and Call for Papers

We are pleased to announce the seventeenth symposium in this important series, which will take place at the Ben-Gurion National Solar Energy Center, Sede Boqer, Israel. The purpose of these symposia is to provide a forum where scientists, industry and government planners can indulge in informed and up-to-date discussion of the relative advantages of various forms of solar power generation, and where each of the technologies stands.

Our confirmed Keynote Speakers are:

Dr. Ned Ekins-Daukes

Imperial College of Science & Technology, London, UK

Nanostructures in high-efficiency photovoltaics

Dr. Kenji Araki

Daido Steel Corp., Nagoya, Japan

Concentrator Photovoltaics: The state of the art

Prof. David Cahen

Weizmann Institute of Science, Rehovot, Israel

Basic Limitations to 3rd generation PV Performance:

Identify → Understand → Avoid?

The Sede Boqer symposia combine solar-thermal and photovoltaic presentations in a single conference *without* parallel sessions. In this way, specialists from both disciplines are able to find out, at first hand, what is happening ‘on the other side of the fence’. To this end, each 20-minute presentation should include 2 minutes at the start devoted to explaining the significance of the reported research in a language that ‘the other side’ will be able to appreciate.

If you wish to present a frontal lecture, please *e-mail* a title and short abstract to (faiman@bgu.ac.il).
Deadline: August 15, 2011. Updates and registration forms will appear regularly at:
<http://cmsprod.bgu.ac.il/Eng/conferences/solar>

Looking forward to a lively and stimulating meeting, and assuring you of our traditional warm welcome at Sede Boqer.

Yours sincerely, on behalf of the symposium committee,

David Faiman.

*Renewable Energies and a Smart Grid – a Joint BGU/ENEA Workshop
October 26, 2011

The intermittent nature of power from renewable energy sources (RES) such as wind and photovoltaics poses a serious challenge to the operators of any electricity grid. These challenges manifest themselves at a number of levels. First is the need for reliable weather forecasting over short (hours) to long (weeks) time scales in order to enable the grid to adjust itself to expected changes in input from large RES systems. Second is the need to develop a revised grid operating strategy that takes into account both the intermittent nature of customer demands (as it does at present) *and* the intermittent input from the RES systems. Third is the complexity of the RES input, coming as it will, both directly from the generators (wind and/or PV) *and* indirectly from a variety of storage systems each with its characteristic (and varying) efficiency.

So-called Smart-Grid research already addresses the challenge of trying to optimize a system so as to minimize energy losses and operating costs, both of multi-dimensional proportions. The anticipated input from RES systems and the additional complication of a possible growing introduction of electric cars, renders this workshop of timely importance.

The aims of the workshop are accordingly: (1) To identify the principal issues that need to be addressed in the integration of RES systems with grid requirements; (2) To identify researchers at BGU and ENEA who's research experience overlaps with these issues; (3) To initiate working relations between BGU and ENEA scientists that might lead to joint projects.

15-minute presentations are therefore invited from any researcher who deems her or his work to be of relevance to the above-stated aims of the workshop.