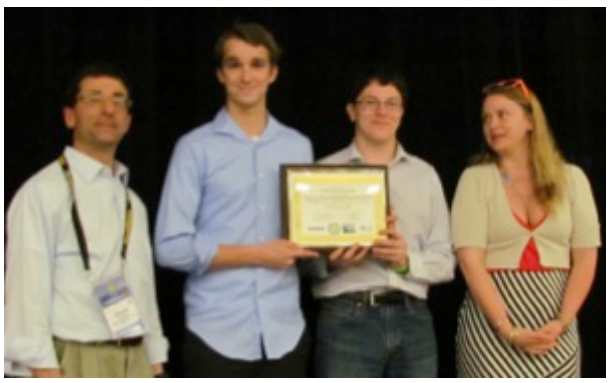
Welcome to the 43rd IEEE Photovoltaic Specialists Conference in Portland! With a program spanning 12 areas (there is even a special 13th session) covering all aspects of PV from the fundamentals through devices and modules and large scale grid integration and policy there will be plenty for all of our more than 1500 attendees to take in and spur more ideas for the future.

Participants in the PVSC have been converging on Portland with many already having made their way to the Oregon Convention Center where this year's event is taking place. For those who have already had a few days to take in Portland and its surrounds I'm sure you agree it is a fantastic setting for talking about the latest results in your favorite subject, PV, while enjoying some cooling liquid refreshments!

This year's PVSC events kicked off on Sunday with tutorials across a wide range of photovoltaic research and applications, and Solar Day at the Oregon Museum of Science and Industry. A celebration of solar, there was a lot to celebrate for Solar Day, with the Mercury climbing and the competition heating up as school teams competed to see who was harnessing the sun's power most effectively. It also gave PV the chance to show the general public with informative displays and presentations not just how exciting PV is, but how it is the future that is already available, delivering clean energy right now.



Photovoltaics International

In the Sunday morning tutorial sessions, Steve Hegedus provided the first of a two part introduction to the fundamentals of PV answering so many of the questions that come up when one first enters the field and continue to arise in relation to PV. Dr. Jeff Gray gave a hands on introduction to the simulation of solar cells, with participants getting their hands dirty (as dirty as they can get using a keyboard) and performing their own simulations. Prof. Gavin Conibeer also took attendees through some of the key concepts being explored in third generation photovoltaics and how they can allow us to potentially take efficiencies beyond the pesky Shockley-Queisser limit and how this is possible. Dr. Paul Basore used his immense experience in PV to take participants through the techno-economic analysis of PV R and D, covering the costings of PV production and identifying uncertainties in your cost modeling. Robert Reedy took tutorial attendees through some of the exciting developments in grid integration and highlighted how the large amount of RE and in particular PV provides a challenge for integration, but also brings huge opportunities for making the grid operate more optimally.




In the afternoon session, Dr Ron Sinton's tutorial looked at the design, technology and device physics of silicon solar cells concentrating on the area where Ron has made so many contributions to the field of PV, namely characterization. Dr. Myles Steiner gave the tutorial on III-V PV taking attendees through the key design approaches needed in this area to deliver the champion PV efficiencies reported, as well as where the latest research in this area is currently. Characterization by IV and QE measurement analysis was the subject of Keith Emery's tutorial session, giving attendees the benefit of his vast experience in determining just how a solar cell is performing. John Wohlgemuth drove the tutorial looking at the increasingly important issue of PV module reliability, taking attendees through the failure models for

modules, how modules are tested and the ongoing efforts to improve testing and analysis of modules for improved reliability. Nicoleta Sorloaica-Hickman and her team also covered hybrid re systems in their tutorial. Looking at some of the different hybrid systems available, and their key characteristics, some of the approaches being taken to optimize the system design in terms of minimizing production costs while servicing the load and the overall environmental impact of the generation, were covered.




That wraps up the opening weekend of the 43rd IEEE PVSC conference! If you haven't done so already, you can still get tickets for this year's Conference Banquet, which will be held at Providence Park on Thursday evening, at the conference registration desk.

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IEEE ELECTRON DEVICES SOCIETY - MEMBERSHIP PROMOTIONS FOR 43rd PVSC ATTENDEES

Be sure to stop by the EDS membership booth, located in the registration area, to learn about the EDS membership promotion deals available to PVSC attendees.

EDS members enjoy a host of important benefits including free, unlimited online access to the IEEE Journal of Photovoltaics. So stop by to learn more. Don't miss this opportunity to become part of the EDS community!

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