

# Orcas 2012: International Conference on Energy Conversion & Storage



The Friday Harbor Laboratories, Friday Harbor, WA  
September 4-6, 2012

## September 4 (Tues)

1:30 pm - 4:30 pm Arrival, Registration, Lunch  
4:30 pm - 6:00 pm Poster Session  
6:00 pm - 7:00 pm Dinner  
7:30 pm - 8:00 pm **Ted Sargent**, University of Toronto  
*Advances in Solution-Processed Quantum Dot Optoelectronic Materials and Devices*

8:00 pm - 8:10 pm Discussion  
8:10 pm - 8:40 pm **Art Nozik**, University of Colorado & NREL  
*Approaches to Future Generation Photovoltaics and Solar Fuels: Multiple Exciton Generation in Quantum Dots and Quantum Dot Arrays, Molecular Singlet Fission, and Quantum Dot Solar Cells*

8:40 pm - 8:50 pm Discussion  
8:50 pm - 9:20 pm **Hugh Hillhouse**, University of Washington  
*Kesterite Solar Cells: State-of-the-art and Grand Challenges for Copper Zinc Tin Sulfide (CZTS) and Selenide (CZTSe) Devices*

9:20 pm - 9:30 pm Discussion  
9:30 pm Reception

## September 5 (Wed)

7:45 am - 8:30 am Breakfast  
8:45 am - 9:15 am **David Mitzi**, IBM TJ Watson Research Center  
*Progress Towards High-Performance Earth-Abundant Kesterite Solar Cells*

9:15 am - 9:30 am Discussion  
9:30 am - 10:00 am **Alberto Salleo**, Stanford  
*Effect of the Microstructure on the Optoelectronic Properties of Conjugated Polymers and Its Relevance to Organic Photovoltaics*

10:00 am - 10:15 am Discussion  
10:15 am - 10:45 am Coffee and Group Photo  
10:45 am - 11:15 am **Aram Amassian**, King Abdullah University of Science and Technology  
*Formation of Bulk Heterojunction Photoactive Layer During Spin-Coating*

11:15 am - 11:30 am Discussion

11:30 am - 12:00 pm **Alan Sellinger**, Colorado School of Mines  
*Materials for Organic Photovoltaics: Non-Fullerene Acceptors for BHJ OPVs and Donor-Acceptor Dyes for ssDSSCs*

12:00 pm - 12:15 pm Discussion

12:30 pm - 1:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster

6:00 pm - 7:00 pm Dinner

7:30 pm - 8:00 pm **Dana Olson**, NREL  
*The Influence of Contact Properties on Device Performance in Organic Solar Cells*

8:00 pm - 8:10 pm Discussion

8:10 pm - 8:40 pm **Danilo Pozzo**, University of Washington  
*Structure-Property Relationships of Semiconductor Organogels Developed through in-situ Rheology, Dielectric Spectroscopy and Small Angle Neutron Scattering*

8:40 pm - 8:50 pm Discussion

8:50 pm - 9:20 pm **Debra Rolison**, U.S. Naval Research Laboratory  
*Enhancing Electrochemical Energy Storage on the Macroscale via Architectural Design on the Nanoscale*

9:20 pm - 9:30 pm Discussion

9:30 pm Reception

### **September 6 (Thurs)**

7:45 am - 8:30 am Breakfast

8:40 am - 9:10 am **Bradley Mitchell**, The Boeing Company  
*Energy Harvesting Applications and Challenges on Commercial Airplanes*

9:10 am - 9:20 am Discussion

9:20 am - 9:50 am **Jihui Yang**, University of Washington  
*Advanced Materials for Future Vehicular Propulsion*

9:50 am - 10:00 am Discussion

10:00 am - 10:30 am Coffee

10:30 am - 11:00 am **Gang Chen**, MIT  
*Nanostructured Materials for Thermoelectric Energy Conversion*

11:00 am - 11:10 am Discussion

11:10 am - 11:40 am **Arumugam Manthiram**, University of Texas at Austin  
*Materials Challenges and Prospects of Electrical Energy Storage*

11:40 am - 11:50 am Discussion

12:30 pm Lunch + Group Departure



Group Photo: Sept 5, 2012