

## **Wednesday, September 21, 2011**

7:30 Breakfast

8:30 Irving Weinberg Award Presentation

### **Session VI**

**US Government Program Overviews and Technology Needs (Invited)**

**Session Chair: Mike Piszczor**

9:15 **Overview of NRL Development of PV for Portable and Remote Power Applications** (Rob Walters/NRL)

9:45 **Status of U.S. Space Solar Array Development** (Brad Reed/SMC Air Force)

10:15 **Air Force Research Laboratory Overview** (David Wilt/AFRL)

10:45 – 11:00 Break

### **Session VII**

**III-V Photovoltaic Materials and Cell Development**

**Session Chair: AnnaMaria Pal**

11:00 **GaAs Substrate Misorientation and the Effect on InAs Quantum Dot Solar Cells** (Seth Hubbard/Rochester Institute of Technology)

11:20 **Investigation of Quantum Dot Enhanced Triple Junction Solar Cells** (Christopher Kerestes/Rochester Institute of Technology)

11:40 **Development and Refinement of Epitaxially-Integrated Semi-Transparent Metamorphic Buffers for III-V/Si Photovoltaics** (Tyler Grassman/Ohio State Univ.)

12:00 **Statistical Analysis of Spectroscopic Images for Characterization of Metal-Enhanced Upconversion** (S. Smith/South Dakota School of Mines and Technology)

12:30 – 1:30 Lunch

1:30 – 2:15 Student Poster Session

### **Session VIII**

Radiation Effects on Photovoltaic Devices

**Session Chair: Barry Hillard**

2:15 **Determination of the Radiation Hardness and the Subcell I-V Characteristics of GaInP/GaInAs/Ge Solar Cells Using Electroluminescence Measurements**  
(Raymond Hoheisel/NRL)

2:35 **Change in the Electrical Performance of GaAs Solar Cells with InGaAs Quantum Dot Layers by Electron Irradiation** (Takeshi Ohshima/JAEA)

3:00 – 4:45 **Workshops**

**Solar Cell Calibration Needs Discussion**

Chairs: David Snyder and David Wilt

**Future of Nanostructured Photovoltaics Discussion**

Chairs: Eric Clark and Seth Hubbard

**Technology Needs for Future Solar Arrays**

Chairs: Michael Piszczor and Thomas Kraft

6:30 – 8:30 **Banquet**