Abstract for ISSST 2016

International Symposium on Sustainable Systems and Technology

*Photovoltaics and the Environment Summit*

**PV: Mega-Trends and Sustainability**

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To better understand the current and future priority areas for PV sustainability research in national labs and the roles envisioned for PV industry stakeholders, it is important to understand the dominant trends that we are seeing in the market place today. These trends include the various market segments (i.e., residential vs. non-residential or utility, fixed vs. tracking, etc.), what technologies are currently filling these markets (i.e., single vs. poly Si, CdTe, CPV, etc.), and what new technologies may or may not be coming down the line (i.e., film Si, epitaxial lift-off, perovskites, etc.). We will contrast he sustainability challenges that arise in the different segments of the PV lifecycle (e.g., manufacturing, installation, recycling) based upon the different technological options. Finally, we will conclude with a review the mega-trends within the PV market, some of the new legislative changes that are likely to impact what we see in the future, and what impacts they are likely to have on PV sustainability.