SusTech 2015 Program Schedule

	Thursday July 30
7:30am	Hotel Shuttle Service 7:30-9:30am
8:00am	Starbucks opens
8:00am	QuickZone Convenience Store opens
8:00am - 5:00pm	**Registration**
9:00am - 2:00pm	**Workshop: Air Pollution [Room 305]** (Includes Lunch 12:00-1:00pm)
4:00pm - 6:00pm	**Undergraduate Poster Contest [Atrium – second floor]**
6:00pm	**Opening Plenary [Ballroom A]** Welcome Remarks Bryce Bird, Utah Department of Environmental Quality Ryan Thomas, Assoc Provost and Dean of Undergraduate Studies Weber State University Jacob Cain, Energy and Sustainability Manager, Weber State University Juliana Boerio-Goates representing the DIOSLC
7:00pm	**Happy Hour and Art Display Tour (Adult only) [Garden]**
7:00pm	**Minor's Party**
	Hotel Shuttle Service 3:30pm – 9:30pm

	Friday July 31		
7:30am	Hotel Shuttle Service 7:30am – 9:30am		
8:00am	Starbucks opens		
8:00am	QuickZone Convenience Store open		
7:30am - 8:30am	**Breakfast [Ballroom A]**		
8:00am - 5:00pm	**Registration [Ballroom A foyer, third floor]**		
	Room 305	**Room 316**	**Room 321**
8:20am - 10:00am	AE Track paper session	SE Track paper session	EE Track paper session
10:00am - 10:20am	Break / Snack		
10:20am - 12:00pm	SI Track paper session	SG Track paper session	AG Track paper session
12:30pm	**Lunch [Ballroom A]**		
1:00pm	**Keynote Speaker** "Ogden: Junction City" Will Bagley, historian and author		

	Room 305	Room 316	Room 321
2:00pm - 3:30pm	AE Track invited session	SG Track invited session	AG Track invited session
3:30pm - 4:00pm	Break / Snack		
4:00pm - 5:30pm	AE/SE Track invited session	TE/SI Track invited session	AG Track invited session
6:00pm	Dinner [Skysuites]		
7:00pm	**Keynote Speaker** "Designing Sustainable Packaging for Implantable Electronic Devices" Michelle Poliskie, Director of Engineering and Electronics, NuSil Technology		
	Hotel Shuttle Service 5:00pm – 9:00pm		

	Saturday August 1		
7:30am	Hotel Shuttle Service 7:30am – 9:30am		
7:30am - 8:30am	Starbucks opens		
7:30am - 8:30am	QuickZone Convenience Store open		
7:30am - 8:30am	**Breakfast [Ballroom A]**		
8:00am - 12:00pm	**Registration [Ballroom A foyer, third floor]**		
	Room 305	**Room 316**	**Room 321**
8:20am - 10:00am	AE Track paper session	SG Track paper session	SE Track paper session
10:00am - 10:20am	Break / Snack		
10:20am - 12:00pm	AE Track paper session	TE Track paper session	EE Track paper session
12:30pm	**Lunch [Ballroom A]**		
1:00pm	**Keynote Speaker** "Sustainable Steam in the Twenty First Century" Wolfgang A. Fengler, Coalition for Sustainable Rail		
2:00pm - 3:00pm	**Panel Discussion / Closing**		
3:00pm	Snack / Hotel Shuttle Service 1:00pm – 4:00pm		
4:00pm	SUSTECH Organization Meeting [Senate Chambers]		

Friday July 31 - SusTech Paper Sessions

	Room 305	Room 316	Room 321
8:20am - 10:00am	AE Track paper session I	SE Track paper session	EE Track paper session
8:20am	*Portable Solar Power: Mobile Elemental Power Plant II*	*Earth Abundant and Nontoxic Absorber Material for Low Cost, Thin Film Solar Cells*	*Demand Response Potential in Aggregated Residential Houses Using GridLAB-D*
8:45am	*Analysis of Various Energy Storage Systems for Variable Speed Wind Turbines*	*New EPEAT® Standards for Computer Servers*	*Influence of Weather Boundary Conditions on Building Energy Modeling*
9:10am	*Thermal Power Satellite Design and Mass Calculation*	*A Prognostics and Health Management Method for Instrumentation System Remanufacturing*	*Experimental Exergy Analysis of the Solar Thermal System in the Off-Grid Zero Emissions Building*
9:34am	*Increasing Power Capture From Wave Energy Conversion Systems Using Model Predictive Control*	*Sustainability in Printed Circuit Board Manufacturing, Decreasing Waste Using Additive Technology*	*A Data-Value-Driven Adaptation Framework for Energy Efficiency for Data Intensive Applications in Clouds*
10:00am - 10:20am	Break / Snack		
10:20am - 12:00pm	SI Track paper session	SG Track paper session I	AG Track paper session
10:20am	The Conceptual Models of Energy Behavior and Energy Behavioral Change	*Overvoltage Mitigation Using Coordinated Control of Demand Response and Grid-tied Photovoltaics*	*CFD Study of Compost Waste Heat for Use in a Hybrid Solar Tower*
10:45am	A Check and Alert Service Based on IoT	*Analysis and Compensation of Dead-time Effect in Direct Matrix Converter*	*Development of Unmanned Aerial Systems for Use in Precision Agriculture: The AggieAir Experience*
11:10am	The TripleRM Sustainability Model: Strategic Risk, Resilience and Resource Management of Cities	*A Comprehensive Analysis of Voltage Stability Indices in the Presence of Distributed Generation*	<open>
11:35am	<open>	*Time Scale Analysis and Synthesis for Electrical Transmission Lines in a Smart Grid*	<open>

Friday, July 31 – Invited Speaker Schedule

	Room 305	Room 316	Room 321
1:30pm - 3:00pm	**AE Track invited**	**SG Track invited**	**AG Track invited**
1:30pm	"Cost-optimal Pathways to 75% Fuel Reduction in Remote Alaskan Villages" Travis Simpkins, NREL	"Enabling smart grid intelligence: A context aware energy resource management approach" Zita Vale, Polytechnic Institute of Porto (Portugal)	"Developing a Solar-Powered, On-Farm Fertilizer Production System using Cyanobacteria" Jessica .G. Davis, Colorado State University
2:00pm	"Beyond Silicon: Alternative Photovoltaic Technologies" Kristin Kiriluk Rabosky, Weber State University	"Flexibility and resilience in future integrated low carbon energy systems" Mathaios Panteli, University of Manchester, Manchester, UK	"Progress in Evaluating and Planning for Sustainable Groundwater-Based Development" Richard C. Peralta, Bassel Timani
2:30pm	"Advances in Wind Energy and the Role of Multidisciplinary Optimization" Andrew Ning, Brigham Young University	"The impact of plug-in electric vehicle charge rates on peak electric demand and on distribution system loading" Don Scoffield, Idaho National Laboratory	"The Utah IPM Program: Delivery of Real-Time Pest Activity to Producers" Marion Murray, Utah State University
3:00pm - 3:30pm	**Break / Snack**		
3:30pm - 5:00pm	**SE Track invited**	**TE/SI Track invited**	**AG Track invited**
3:30pm	"A Moore's Law for Mobile Power" Tom Coughlin, Coughlin Associates	"Quantifying Transit's Role in Improving Air Quality" Dan Locke, Utah Transit Authority	"Quantifying the Chemistry, Transport, and Fate of Pesticides in the Environment: Soil-Air-Water" Rong Li, Utah State University
4:00pm	<open>	"An International Collaboratory for the Advancement of Appropriate Technology Solutions" Ramana Reddy, WVU	"A Combined Dynamical and Statistical Technique for Producing Regional Climate Predictions" Rong Li, Utah State University
4:30pm	<open>	"Old, New, or In-between: The Indigenous Dilemma" Stephen Clark, Weber State University	"Irrigation Scheduling Based on Plant and Climate Measurements" Niel Allen, Utah State University

Saturday August 1 - SusTech Paper Sessions

	Room 305	Room 316	Room 321
8:20am - 10:00am	**AE Track paper session II**	**SG Track paper session II**	**SE Track paper session**
8:20am	**Design of Housing and Mesh Spacer Supports for Salinity Gradient Hydroelectric Power Generation Using Pressure Retarded Osmosis**	**Reduced Order WECC Modeling for Frequency Response and Energy Storage Integration**	**E-waste Dismantling: Profitable At a Cost of Occupational Hazard?**
8:45am	**Creating a Dynamometer for Experimental Validation of Power Take-Off Forces on a Wave Energy Converter**	**Status and Challenges of Residential and Industrial Non-Intrusive Load Monitoring**	**Circuit Design to Improve Security of Telecommunication Devices**
9:10am	**Wind Farm Layout Optimization Using Sound Pressure Level Constraints**	**Rapid Grid State Estimation Using Singular Value Decomposition Similarity Matching**	<open>
9:34am	**Reliability Assessment for Smart Grid and Future Power Distribution Systems**	<open>	<open>
10:00am - 10:20am	Break / Snack		
10:20am - 12:00pm	**AE Track paper session III**	**TE Track paper session**	**EE Track paper session II**
10:20am	**Effect of Airfoil and Composite Layer Thicknesses on an Aerostructural Blade Optimization for Wind Turbines**	**An Approach to Engage EVs for Frequency Regulation: Aggregator Perspective**	**Geothermal Power Plant System Performance Prediction Using Artificial Neural Networks**
10:45am	**Comparison of Two Wake Models for Use in Gradient-based Wind Farm Layout Optimization**	**Solar Energy for Electric Vehicles**	**Energy Consumption Modeling and Analyses in Automotive Manufacturing Final Assembly Process**
11:10am	**Stationary Compression Ignition Internal Combustion Engines (CI-ICE) CO2 Capturing Via Microalgae Culture Using a Mini-Photobioreactor**	**Data-mining Approach for Battery Materials**	<open>
11:35am	<open>	**Feasibility of Wireless Power Transfer for Electrification of Transportation: Techno-economics and Life Cycle Assessment**	<open>