

VIRTUAL Program Schedule

Paper Sessions & Keynotes – Friday & Saturday April 24-25

| Time | Friday, April 24 | | Time | Saturday, April 25 | |
|---------------------|---|--|---------------------|---|--|
| 8:00 am – 9:00 am | Welcome + Keynote 1 Dong Tan, Northrop Grumman Aerospace Systems “Power Electronics, Smart Grid and Grid Modernization” | | 8:00 am – 8:40 am | Keynote 3 Kay Das, Life Member IEEE “Challenges of the Connected Vehicle Revolution” | |
| 9:00 am – 10:00 am | Session 1 | Intelligent Transportation Systems eWaste | 8:40 am – 10:20 am | Session 7 | Sustainable Electronics II |
| 10:00 am – 10:30 am | Break | | 10:20 am – 10:30 am | Break | |
| 10:30 am – 11:50 am | Session 2 | Sustainable Electronics I | 10:30 am – 11:50 am | Session 8 | Energy Efficiency II |
| 11:50 am – 12:20pm | Lunchtime | | 11:50 am – 12:20pm | Lunchtime | |
| 12:20pm – 1:00 pm | Keynote 2 Glenn Roquemore, Chancellor, California Southern University “Lessons learned from the July 2019 Ridgecrest, CA earthquakes, changes how we determine seismic risk in buildings” | | 12:20pm – 1:00 pm | Keynote 4 Seth D. Potter, Ph.D, SDP Space Systems “Orbit Options for Near-Term Space Solar Power” | |
| 1:00 pm – 2:00 pm | Session 3 | Smart Grid I | 1:00 pm – 2:00 pm | Session 9 | Smart Grid II |
| 2:00 pm – 2:30 pm | Break | | 2:00 pm – 2:30 pm | Break | |
| 2:30 pm – 3:50 pm | Session 4 | Energy Efficiency I | 2:30 pm – 3:50 pm | Session 10 | Internet of Things II Societal Implications / Quality of Life I |
| 3:50 pm – 4:00 pm | Break | | 3:50 pm – 4:00 pm | Break | |
| 4:00 pm – 5:20pm | Session 5 | Internet of Things I | 4:00 pm – 5:20pm | Session 11 | Societal Implications / Quality of Life II |
| 5:20pm – 5:30pm | Break | | 5:20pm – 5:30pm | Break | |
| 5:30pm – 6:50pm | Session 6 | Water Resources Management | 5:30pm – 6:50pm | Session 12 | Sustainable Electronics III Renewable/Alternative Energy |

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Accepted Papers by Session

| EDAS ID | Title |
|--|--|
| S4: Energy Efficiency I | |
| 1570598430 | AC Vs DC Power Efficiency Comparison of a Hybrid Wind/Solar Microgrid |
| 1570597838 | Optimal Seasonal Wind Curtailment for Islanded Provisional Microgrid Operation |
| 1570604747 | Sensor Node Design for Energy Savings in Building Energy Management Systems |
| 1570604786 | Clean Air with a Mongolian Ger |
| S8: Energy Efficiency II | |
| 1570604807 | UAV Power Management, Generation, and Storage System Principles and Design |
| 1570605061 | How the Fluorescent and LED Lamps Affect the DC Home Nanogrids |
| 1570605119 | Non-Linear Control Strategy for a Two Body Point Absorber Wave Energy Converter Using Q Actor-Critic Learning |
| 1570599329 | A Better Policy for Electric and Low-Emission Cars Using Systems Thinking |
| S1: Intelligent Transportation Systems & eWaste | |
| 1570594836 | Electric Vehicle Charge Management for Lowering Costs and Environmental Impact |
| 1570597065 | Thermal Control Compensation of Induction Motor Drive in Electrified Powertrain |
| 1570604340 | Acceptance of E-waste Recycling Among Young Adults: An Empirical Study |
| S5: Internet of Things (IOT) for sustainability I | |
| 1570604722 | Implementing an IoT Energy Monitoring System Using the Challenge-based Learning Model |
| 1570605087 | Hybrid Environment IOT-Mapping of Over-Tourism and Air Pollution in the Azores Archipelago |
| 1570605147 | The Potential of New Data Sources in a Data-Driven Transportation, Operation, Management and Assessment System (TOMAS) |
| 1570596776 | A Modular, Scalable Automation System for a Distribution Substation |
| S3: Smart Grid I | |
| 1570597209 | Optimal PID Parameters Tuning for a DC-DC Boost Converter: A Performance Comparative Using Grey Wolf Optimizer, Particle Swarm Optimization and Genetic Algorithms |
| 1570597326 | Comparison of Short-Term Load Forecasting Techniques |
| 1570604794 | Implementation of Critical Care Customer Within a Small-Scale Model of a Smart Grid |
| S9: Smart Grid II | |
| 1570605057 | A New Model to Analyze Power and Communication System Intra-and-Inter Dependencies |
| 1570605139 | Disaggregation of Behind-the-Meter Solar Generation in Presence of Energy Storage Resources |
| 1570627076 | Real Time Indoor Positioning System for Smart Grid Based on UWB and Artificial Intelligence Techniques |

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S10: Internet of Things (IOT) for sustainability II

1570605167 Mitigation of Grid Susceptibility Caused by Behind-the-Meter Solar Generation

Societal Implications / Quality of Life I

1570596866 Electric Utilities' Role in Promoting and Advancing Smart City Initiatives

1570605173 Toward Smart and Sustainable Infrastructure Solution: Assessment and Modelling of Qualitative Factors Affecting Productivity in Microtunneling Projects

1570604811 MiSA - A System for a Microlending Service to Assist Edge Communities

S11: Societal Implications / Quality of Life II

1570605168 The Community Human Development Index (CHDI): Localizing Sustainable Development Goals Across Scales

1570605177 Expert-based Risk Level Assessment Model for Microtunneling Projects

1570602883 Big Charging: The Large Power Demanding Future of Electric Vehicles

1570599262 Tile Arrays for Space Based Solar Power Satellites

S2: Sustainable Electronics I

1570598361 Extracting Clean Energy Through the Design of a Mesoscopic Low-Power Hydrokinetic Turbine

1570604810 Power System Protection in RTDS

1570605096 A LoRa-based Dual-CPU Core Salton Sea Environmental Monitoring Wireless Sensor System

1570605121 Power Quality Evaluation of Six-Step Commutation Brushless DC Motor Implemented on 32-Bit ARM Cortex Microcontroller

S7: Sustainable Electronics II

1570593440 Auto-Configurable Feature in Universal Remote Terminal Unit (uRTU)

1570605113 Sustainability Driven Performance Evaluation of Underground Smart Grid Conversion

1570575113 A Solar-Based Stand-Alone Family House for Energy Independence and Efficiency

1570605114 Effect of Printing Technology to Electricity and Environment

1570629960 Event Flow Measurements in Remote Tropical Watersheds in the Philippines: The Need for Automated Weather-proof Devices

S12: Sustainable Electronics III

1570624538 A Luminous-free Remote Surveillance System with Inherent Video Overlay and IP Encoder

Renewable/Alternative Energy - Solar/Wind/Other

1570605180 Optimal Energy Storage Schedules for Load Leveling and Ramp Rate Control in Distribution Systems

1570586045 Gender Considerations in Load Estimation for Rural Electrification

1570591482 A Tool for Modernizing the Grid

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S6: Water Resources Management

- 1570605137 Toward Sustainable Clean Water: Water Failure Prediction Model in Water Distribution Networks
- 1570624445 Assessment of the Existing Drainage System in Infanta, Quezon Province for Flood Hazard Management Using Analytical Hierarchy Process
- 1570624451 Application of Artificial Neuro-Fuzzy Interference System in Rainfall-Runoff Modelling at Imus River, Cavite
- 1570598212 Smart Watershed Monitoring for near Real-time Hydrologic Modeling in a Tropical Environment: The Case of Magat River Basin in Luzon, Philippines