

PERUVIAN WORKSHOP ON SOLAR ENERGY

JORNADAS PERUANAS DE ENERGÍA SOLAR (JOPES 2020)

ZOOM MEETING, UNIVERSIDAD NACIONAL DE INGENIERÍA (UNI)
JUNE 25 – 26, 2020

THURSDAY 25

| HOUR | SPEAKER |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:00 – 08:15 | Opening event: Vice Rector for Research, UNI, Dr. Walter Estrada |
| | Plenary sessions |
| 08:15 – 08:55 | Technical criteria for sizing photovoltaic solar systems <i>Rodrigo Valdovinos, University of Chile</i> |
| 08:55 – 09:35 | Internet of Things and Energy in Buildings <i>Guillermo Barrios, Autonomous University of Mexico</i> |
| Technical Sessions | |
| 09:35 – 09:55 | MPPT for Particle Swarm Optimization for a Series Resonant DAB converter <i>J. Arredondo, Universidad Nacional de Ingeniería</i> |
| 09:55 – 10:15 | Design of a temporary hospital module to do COVID-19 testing with an autonomous photovoltaic system <i>R. Cabrejos, Universidad Nacional de Ingeniería</i> |
| 10:15 – 10:30 | Break |
| 10:30 – 10:50 | Monitoring of the nominal power of three different PV technologies in the coast of Lima-Peru <i>B. Calsi, Pontificia Universidad Católica del Perú</i> |
| 10:50 – 11:10 | Open-source monitoring system based on IEC standards for irradiance and module temperature measurements in PV systems <i>A. Carhuavilca, Pontificia Universidad Católica del Perú</i> |
| 11:10 – 11:30 | Silicon surface passivation studied by surface photovoltage spectroscopy <i>J. Dulanto, Pontificia Universidad Católica del Perú</i> |
| 11:30 – 11:50 | Construction of a CSS of ceramic for CdTe deposition, p-type semiconductor <i>K. Janampa, Universidad Nacional de San Cristóbal de Huamanga</i> |
| 11:50 – 12:10 | Combined model for a lithium battery to optimize its performance and life cycle <i>V. Nakama, Universidad Nacional de Ingeniería</i> |
| 12:10 – 14:00 | Lunch |
| 14:00 – 14:20 | Auctions in Renewable Energy and the Grid Parity Using Solar Photovoltaic Technology in Peru <i>J. Arredondo, Universidad Nacional de Ingeniería</i> |
| 14:20 – 14:40 | Design of a Solar Charging Station for Electric Vehicles in Shopping Centers <i>C. Peña, Universidad Nacional de Ingeniería</i> |
| 14:40 – 15:00 | Comparison of numerical and analytical methods for the extraction of PV module electric parameters <i>R. Perich, Pontificia Universidad Católica del Perú</i> |
| 15:00 – 15:20 | Validation of Ozone Monitoring Instrument (OMI) UV index data from ground-based measurements in the Puno region <i>C. Taipe, Universidad Nacional del Altiplano</i> |
| 15:20 – 15:40 | Extreme Overirradiance events in Lima, Peru <i>M. Zamalloa, Pontificia Universidad Católica del Perú</i> |

FRIDAY 26

| HOUR | SPEAKER |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Plenary sessions |
| 08:30 – 09:10 | Contribution of the modal method to the energy design of resilient and sustainable buildings <i>Gilles Lefebvre, University of Paris East</i> |
| 09:10 – 09:50 | Numerical simulations of evaporative cooling in the design of a bioclimatic building <i>Jorge Rojas, Autonomous University of Mexico</i> |
| Technical Sessions | |
| 09:50 – 10:10 | Design and construction of portable apparatus to measure thermal conductivity <i>M. Cuenca, Universidad Nacional de Ingeniería</i> |
| 10:10 – 10:30 | Thermal, Structural and Mechanical Characterization of the Arequipa Airport Ignimbrite <i>F. Espinoza, Universidad Nacional de Ingeniería</i> |
| 10:30 – 10:45 | Break |
| 10:45 – 11:05 | Primary standard of thermal conductivity measurement for construction materials <i>A. Guzman, Universidad Nacional de San Agustín de Arequipa</i> |
| 11:05 – 11:25 | Use of clean energy: Skylights for optimizing milk production <i>R. Lozano, DESCO</i> |
| 11:25 – 11:45 | Simulation and thermal characterization of a room in the Imata medical post, Arequipa (4519 msnm) <i>F. Menacho, Universidad Nacional de Ingeniería</i> |
| 11:45 – 12:05 | Thermo-physical characterization of conventional materials used in walls: measurement of their specific heats <i>J. Molina, Universidad Nacional de Ingeniería</i> |
| 12:05 – 14:00 | Lunch |
| 14:00 – 14:20 | Comfort Analysis of AYNÍ house at the Solar Decathlon Latin America and Caribbean 2015 <i>D. Ocupa, Universidad Nacional de Ingeniería</i> |
| 14:20 – 14:40 | Analysis of preference of illuminance level and CCT using a simple light controller <i>F. Oscoco, Universidad Nacional de Ingeniería</i> |
| 14:40 – 15:00 | Comparison of the thermal conductivity between an experimental device and a model using COMSOL MULTIPHYSICS <i>J. Piñas, Universidad Nacional de Ingeniería</i> |
| 15:00 – 15:20 | Sustainable Energization for the Development of the High Andean rural sector of Peru, based on Renewable Energy Potential. Case study: San Francisco de Raymina, Ayacucho <i>C. Salvador, Universidad Nacional de Ingeniería</i> |
| 15:20 – 15:40 | Simulation of the thermal and fluid-dynamic behavior of a Chimney Solar Dryer <i>L. Vegas, Universidad de Piura</i> |
| 15:40 – 16:10 | Workshop on how to get published the paper in the Proceedings of JOPES |
| 16:10 – 16:40 | Closing event |