

PERUVIAN WORKSHOP ON SOLAR ENERGY

JORNADAS PERUANAS DE ENERGÍA SOLAR 2021 (JOPES 2021)

SESIONES DE ZOOM, UNIVERSIDAD NACIONAL DE INGENIERÍA (UNI)

MAY 12 - 14, 2021

WEDNESDAY 12

HOUR	SPEAKER	Session chairman
08:00 – 08:10	Welcome	M. Gómez
08:10 – 08:30	Opening event Benjamin Marticorena , <i>Presidente del Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica del Perú</i>	
08:30 – 09:10	Hybrid Perovskite Solar Cells: Its Origin and Some of the Research Works Hailin Zhao Hu , <i>Instituto de Energías Renovables, Mexico</i>	
09:10 – 09:50	Development of functional materials and interfaces for dye-sensitized and perovskite solar cells Anders Hagfeldt , <i>Uppsala University, Sweden</i>	
09:50 – 10:10	Break	
10:10 – 10:50	The quality of Grid connected photovoltaic systems. Brazilian standards for commissioning tests and inspection Roberto Valer , <i>Instituto de Electrotécnica y Energía de la Universidad de Sao Paulo, Brazil</i>	A. Palomino
10:50 – 11:10	Photovoltaic Acai Berry Juice Extractor Machine Maria das Graças Almeida Anita , <i>Universidade Federal do Amapá, Brazil</i>	
11:10 – 11:30	PV generator nominal power estimation using ground sensors and online irradiance database José Rubén Angulo Abanto , <i>Pontificia Universidad Católica del Perú</i>	
11:30 – 11:50	Resolving challenges of monitoring different PV system technologies in Lima, Peru Arturo Berastain , <i>Pontificia Universidad Católica del Perú</i>	
11:50 – 12:10	A general study of designing an electromagnetic induction cooking device prototype for microgrids in rural areas Ximena Lucia Carbajal López , <i>Universidad Nacional de Ingeniería, Peru</i>	
12:10 – 14:00	Lunch	
14:00 – 14:20	Tilt angle's impact on soiling accumulation: the case of installed PV modules in São Paulo, Brazil Ícaro Da Silva Misquita , <i>University of São Paulo, Brazil</i>	G. Cruz
14:20 – 14:40	PV pumping system daily capacity performance condition validation Teddy Arturo Flores Melendez , <i>University of São Paulo, Brazil</i>	
14:40 – 15:00	Low Power Meter and Monitoring Device to Improve the Sizing of On-grid Photovoltaic Systems José Armando Gastelo Roque , <i>Universidad Nacional Pedro Ruiz Gallo, Peru</i>	
15:00 – 15:20	PV connected to grid with Power Smoothing Erick Braian Pantaleon Meza , <i>Universidad Nacional de Ingeniería, Peru</i>	
15:20 – 15:40	Maximum Power Transfer from a Photovoltaic solar panel to a battery, using a MPPT algorithm Antenor Aliaga Zegarra , <i>Universidad Nacional de Piura, Peru</i>	
15:40 – 16:00	The potential of energy storage systems associated with PV generation to postpone investments in capacity expansion Alex R. A Manito , <i>University of São Paulo, Brazil</i>	
16:00 – 16:20	Estimation of cycling aging of lithium-ion batteries for photovoltaic microgrids applications Víctor Luis Nakama Martínez , <i>Universidad Nacional de Ingeniería, Peru</i>	

THURSDAY 13

HOOR	SPEAKER	Session chairman
08:30 – 09:10	Intensive use of solar energy: technological applications for the production of aquacultural species in the northern zone of Chile Lorena Cornejo , <i>University of Tarapacá, Chile</i>	M. Gómez
09:10 – 09:50	Design of TiO ₂ -based photocatalysts in various macroscopic forms for environmental pollution reduction Lenka Matejova , <i>VSB-Technical University of Ostrava, Czech Republic</i>	
09:50 – 10:10	Break	
10:10 – 10:50	Water purification in rural areas using solar energy Juan Rodríguez , <i>Universidad Nacional de Ingeniería, Peru</i>	J. Solís
10:50 – 11:10	Agricultural residue-based activated carbon impregnated with chitosan nanoparticles by hydrothermal treatment Gerardo Cruz Cerro , <i>Universidad Nacional de Tumbes, Peru</i>	
11:10 – 11:30	Design of an autonomous photovoltaic system for desalination of groundwater by electrodialysis Alex Willy Pilco Nuñez , <i>Universidad Nacional de Ingeniería, Peru</i>	
11:30 – 11:50	Biochar functionalized with ZnO nanoparticles to improve its adsorption capacity John Henry Rimaycuna Ramirez , <i>Universidad Nacional de Tumbes, Peru</i>	
11:50 – 12:10	Is the information provided by satellite sources suitable for predicting or evaluating the performance of photovoltaic systems in Peru? (In memoriam to Heinrich Berg) Cesar Augusto Espinoza Gonzales , <i>University of Jaen, Spain</i>	
12:10 – 14:00	Lunch	
14:00 – 14:20	Implementation of a system based on IEC standards for monitoring the irradiance and temperature of grid-connected Photovoltaic systems Alejandro Carhuavilca Vela , <i>Pontificia Universidad Católica del Perú</i>	G. Cruz
14:20 – 14:40	Design of a Portable Equipment for Global Irradiance Measurement Roosebelt Yonatan Carmen Aguirre , <i>Universidad Nacional de Piura, Peru</i>	
14:40 – 15:00	Environmental impact of the energy supply of the Tacna region, Perú Carlos Armando Polo Bravo , <i>Universidad Nacional Jorge Basadre Grohmann, Peru</i>	
15:00 – 15:20	Estimation of the ultraviolet solar radiation index in the city of Puno Matias Huilca Arbieta , <i>Universidad Nacional del Altiplano, Peru</i>	
15:20 – 15:40	Global Radiation Time Serie Forecasting using Multilayer Perceptron Jhon J. Peñalva Sánchez , <i>Universidad Nacional de Ingeniería, Peru</i>	
15:40 – 16:00	Forecasting solar radiation using a Long-Term Memory Neural Network Andersson Romero Deza , <i>Universidad Nacional de Ingeniería, Peru</i>	
16:00 – 16:20	Average photon energy assessment based on modelled spectra NRSDB-datasets for Lima, Peru Miguel Angel Sevillano Bendezú , <i>Pontificia Universidad Católica del Perú</i>	
16:20 – 16:40	Estimation of solar radiation by model dependent on extreme temperatures for the Puno region Ciro Taipe , <i>Universidad Nacional del Altiplano, Peru</i>	

FRIDAY 14

HOURL	SPEAKER	Session chairman
08:30 – 09:10	Analysis and Technical Inspection of Solar Thermal Systems in Chile; 10 years of implementation of the Tax Benefit for Sanitary Hot Water Systems Rodrigo Valdovinos , Instituto del Medio Ambiente, Chile	E. Saettone
09:10 – 09:50	El bioclimatismo en la obra pública de principios del siglo XXI en el noroeste de Argentina Alejandro Hernández , Instituto de Investigaciones en Energías no Convencionales, Argentina	
09:50 – 10:10	Break	
10:10 – 10:50	Photovoltaic and Energy Storage Systems: a perfect match for a renewable future Marcelo Almeida , Institute of Energy and Environment of the University of São Paulo, Brazil	A. Palomino
10:50 – 11:10	Experimental Study of Epoxy based Graphite coating on Parabolic Trough Solar Collector Abhijeeth Nagaraj , Jain (Deemed-to-be University), India	
11:10 – 11:30	Thermal Evaluation in Steady State of an All Glass Evacuated Tube Solar Water Heater at 4260 masl John Alfredo Chuquimia López , Universidad Nacional Jorge Basadre Grohmann, Peru	
11:30 – 11:50	Energy assessment of a concentrated parabolic solar field in Piura Erich Saettone , Universidad de Lima, Peru	
11:50 – 12:10	Energy analysis of a nZEB standard building: a case study in Rio de Janeiro Vitória Valéria Henrique , Federal Fluminense University, Brazil	
12:10 – 14:00	Lunch	
14:00 – 14:20	Bioclimatic Design Strategies in colonial residential architecture Syra Patricia Alvarez Ortega , Universidad Nacional de Ingeniería, Peru	E. Saettone
14:20 – 14:40	Housing Public Policy and Thermal Comfort in Brazil Vinicius Leão , Federal Fluminense University, Brazil	
14:40 – 15:00	Modeling the effect of roof coatings materials on the buildings' internal temperature based on artificial intelligence approach Oscar de Jesús May Tzuc , Universidad Autónoma de Campeche, Mexico	
15:00 – 15:20	Low Cost Portable System for Measuring Thermal Conductivity of Building Materials Alicia Lelia Puma Taco , Universidad Nacional de San Agustín de Arequipa, Peru	
15:20 – 15:50	Workshop on how to get published a paper in the Proceedings of JOPES José Solis	
15:50 – 16:20	Closing event Manfred Horn	