



Program Thursday, October 20

14:00	Technical Session XVII: Energy I	Country
#	Chair : Marco Rivera (Chile), Lucas Araujo (Brazil)	
10	Yasser Rahmatikukandeh. <i>Microgrid Control In Islanding And Connected Mode</i>	Iran
11	Yasser Rahmatikukandeh. <i>Effect of maintenance on reliability of Microgrid</i>	Iran
32	S Monesha, S. Ganesh Kumar and Marco Rivera. <i>Microgrid Energy Management and Control: Technical Review</i>	India; Chile
125	Lucas Araújo, Dante Narváez, Marcelo Villalva and Thais Siqueira. <i>Modified Droop Control for Low Voltage Single Phase Isolated Microgrids</i>	Brazil

14:00	Technical Session XVIII: Power Electronics I	Country
#	Chair : Santiago Verne (Argentina), Marco Rivera (Chile)	
21	Dr. Ganesh Kumar Srinivasan and Dr.Hosimin Thilagar Srinivasan. <i>Cost Effective Control of a Partially Flat Boost Converter fed DC motor</i>	India
42	Dhanasekar Ravikumar, Ganesh Kumar Srinivasan and Marco Rivera. <i>Sliding Mode Control of Electric Drives/Review</i>	India; Chile
43	Vijayaraja Loganathan, Ganesh Kumar Srinivasan and Marco Rivera. <i>A Review On Multilevel Inverter With Reduced Switch Count</i>	India; Chile
144	Santiago A. Verne, Sergio A. González, María I. Valla and Marco Rivera. <i>Predictive Control of a Single Phase Current Source-Fed Multilevel Converter</i>	Argentina; Chile

14:00	Technical Session XIX: Computer Networks	Country
#	Chair : Ginno Millán (Chile), Carlos Pillajo (Ecuador)	
56	Carlos Pillajo and Paul Bonilla. <i>Implementation Of a Wireless Network Control System using smart Sensors-Actuator</i>	Ecuador
137	Ginno Millan, Marcos Chait and Gaston Lefranc. <i>High-speed computer networks, Hurst exponent (H), self-similarity, traffic modeling.</i>	Chile
13	Darwin Aguilar, Leonardo Erazo, Paola León and Carlos Aguilar. <i>Electronic prototype for measuring network parameters on the service offered - delivered by ISP</i>	Ecuador
2	Awais Ahmad, M. Mazhar Rathore and Anand Paul. <i>Extension of Group Mobility to PMIP-SAE for 6LoWPAN-based Wireless Body Area Networks</i>	Korea

14:00	Technical Session XX: Biomedical Engineering I	Country
#	Chair : Patricia Constante (Ecuador), Antonio Rienzo (Chile)	
25	Thiago Cordeiro, Daniel Sousa, Antonio Lima and Idágene Cestari. <i>Controlling the cardiovascular response under synchronized ventricular assist device support</i>	
30	Antonio Rienzo. <i>Analysis and Repository of Services Telemedicine in Chile (Repositorio y Análisis de Servicios de Telemedicina en Chile).</i>	Chile
48	Alejandra Fonseca, Darwin Alulema, Flavio Pineda, Derlin Morocho and Francisco Encalada. <i>Auxiliar Prototype for Physiotherapy using Kinect</i>	
78	Andres Gordon, Patricia Constante, Oscar Chang, Edwin Pruna and Ivón Escobar. <i>Neural Network for Optic Nerve Detection in Fundus Digital Image</i>	Ecuador

14:00	Technical Session XXI: Computer vision	Country
#	Chair : Román Osorio (Chile) , Vanel Lazcano (Chile)	
82	Alfredo Reyes-Acosta, Ismael Lopez-Juarez, Román Osorio-Comparán and Gaston Lefranc. <i>Towards 3D Pipe Reconstruction Employing Affine Transformations From Video Information</i>	México; Chile
139	Vanel Lazcano. <i>Cálculo de Flujo Óptico en Tiempo Real para Imágenes con Grandes Desplazamientos</i>	Chile
97	Jose Pedreros, Cristian Pavez, Mario Castro, Adolfo Sepulveda, Francisco Watkins, Leopoldo Soto and Gonzalo Avaria. <i>Multi-frame Digital Interferometry Using a Single Digital Record System</i>	Chile

16:00	Technical SessionXXII: Energy II	Country
#	Chair : Carolina Ponce (Chile), Vladimir Esparza (Chile)	
66	Mahajan Sagar Bhaskar, Prof.Dr.Sanjeevikumar Padmanaban, Olorunfemi Ojo, Marco Rivera and Rishi M.Kulkarni. <i>Non-Isolated and Inverting Nx Multilevel Boost Converter For Photovoltaic DC Link Applications</i>	India; South Africa; USA; Chile
146	Marco Rivera, Luis Alejandro Morán Tamayo, Sergio Toledo and José Espinoza. <i>An Overview of Solar Energy in Chile</i>	Chile
4	Carolina Ponce. <i>Model Predictive Control Strategy Evaluation of an Integrated Solar Combined Cycle Plant</i>	Chile
29	Pablo Henriquez, Saul Cuevas, Jaime Addin Rohten, Sergio Araya, Vladimir Esparza, Gustavo Sanhueza and Pedro Melin. <i>Nonlinear Control for Power Converters Injecting the Maximum Power from PV Arrays</i>	Chile

16:00	Technical Session XXIII: Control I	Country
#	Chair : Ricardo Aguilar-López (México), Manuel Duarte-Mermoud (Chile)	
61	Ricardo Aguilar-Lopez, Juan Mata-Machuca, Leonardo Fonseca and Jorge Fonseca. <i>An Observer for a Class of Nonlinear Systems: an Application to Synchronization Problem</i>	México
62	Ricardo Aguilar-Lopez, Juan Mata-Machuca, Leonardo Fonseca and Jorge Fonseca. <i>Synchronization of a class of fractional order systems via feedback control</i>	México
65	Rodrigo Oróstica, Manuel Duarte-Mermoud and Cristian Jáuregui. <i>Stabilization of Inverted Pendulum Using LQR, PID and Fractional Order PID Controllers: A Simulated Study</i>	Chile
95	Carlos Fuhrhop, Paolo Mercorelli and Daniel Quevedo. <i>Adaptive Control of the Nonlinear Dynamic behavior of the cantilever-sample system of an Atomic Force Microscope.</i>	Germany

16:00	Technical Session XIV: Communication I	Country
#	Chair : Héctor Kaschel (Chile), Hugo Garcés (Chile)	
28	Hector Kaschel and Johanna Ortega. <i>Eficiencia energética en protocolos de enrutamiento aplicados a WSN</i>	Chile
31	Hector Kaschel and Cristian Ahumada. <i>Diseño de una Antena Microstrip de tres bandas para una WBAN de bajo SAR</i>	Chile
46	Hugo Garces, Alejandro J. Rojas and Luis Arias. <i>Selection of nonlinear structures for total radiation modeling</i>	Chile
54	Ana Yacchirena, Darwin Alulema, Darwin Aguilar, Derlin Morocho, Francisco Encalada and Evelio Granizo. <i>Analysis of Attack and Protection Systems in Wi-Fi Wireless Networks under The Linux Operating System</i>	Ecuador

16:00	Technical Session XXV: Education I	Country
#	Chair : Ernesto Rubio (Chile), Jorge Cornejo (Chile)	
36	Jorge Cornejo. <i>Propuesta de Buenas prácticas para guiar el proceso Aprendizaje + Acción</i>	Chile
49	María Gabriela Vintimilla, Darwin Alulema, Derlin Morocho, Mariela Proaño, Francisco Encalada and Evelio Granizo. <i>Development and Implementation of an Application that Translates The Alphabet and The Numbers from 1 to 10 from Sign Language to Text to Help Hearing Impaired by Android Mobile Devices</i>	Ecuador
50	Diana Martínez, Darwin Alulema, Danilo Martínez, Derlin Morocho and Francisco Encalada. <i>Feasibility Study for the Implementation of a Collaborative Learning Virtual Environment Training Company</i>	Ecuador
143	Ernesto Rubio, Iván Santana, Vladimir Esparza and Jaime Rohten. <i>Remote Laboratories for Control Education: Experience at the Universidad del Bío-Bío</i>	Chile; Cuba

16:00	Technical Session XXVI: Industrial Engineering I	Country
#	Chair : Claudia Durán (Chile), Cristian Carangui (Ecuador)	
27	Paola León, Darwin Aguilar, Freddy Maldonado and Nestor Vargas. <i>Foamy CNC Laser Cutting Machine</i>	Ecuador
107	Cristian Gabriel Carangui Velecela, Paúl Delgado Espinoza, Marco Alexander Carpio Aleman and Diego Paul Chacón Troya. <i>Experimental Identification of the Transfer Function Model of a Scale Vtol System by PRBS Signals Under Ground Effect</i>	Ecuador
80	Claudia Duran, Felisa Cordova and Fredi Palominos. <i>Análisis multi-criterio de las relaciones sinérgicas estratégicas entre un puerto mediano chileno y su macro-entorno</i>	Chile
84	Ivaldir Farias Junior, Rafael Lima, Nelson Leitão Júnior and Marcelo Mendonça Teixeira. <i>Urbis: A Touristic Virtual Guide</i>	Brazil

17:30	Technical Session XXVII: Energy III	Country
#	Chair : Humberto Verdejo (), Marco Rivera (Chile)	
86	Sergio Toledo, Marco Rivera and José Luis Elizondo. <i>Overview of Wind Energy Conversion Systems Development, Technologies and Power Electronics Research Trends</i>	Chile; México
120	Humberto Verdejo F. and Flavio Serey L.. <i>HVDC and AC Connection of Wind Farms Behavior in Chilean Power System</i>	Chile
149	S.B. Mahajan, P. Sanjeevikumar, Patrick Wheeler, Frede Blaabjerg, Marco Rivera, Ahmet H. Ertas and Rishi Kulkarni. <i>X-Y Converter Family: A New Breed of Buck Boost Converter for High Step-up Renewable Energy Applications</i>	India; UK; Denmark; Chile; Turkey
145	Marco Rivera, Rubén Peña, Gustavo Hunter, Sergio Toledo and Javier Muñoz. <i>Wind Energy in Chile: Potential, Technology and Development</i>	Chile

17:30	Technical Session XXVIII: Control II	Country
#	Chair : Guilherme Schievelbein (Brazil), ()	
59	Guilherme Schievelbein, Cristina Paludo Santos and Alexandre Roque. <i>Fuzzy Control Methodology for Continuous Passive Motion Equipment</i>	Brazil
114	Huber Nieto-Chaupis. <i>Measurement of the Probability of Call Completion with the Dirac-Delta Convolution</i>	Perú
142	Edilberto Vásquez Días and Martín A. Capcha. <i>Close loop identification in a four coupled tanks system</i>	Perú

17:30	Technical Session XXIX: Communication II	Country
#	Chair : Alexandre Roque (Brazil), Óscar Vásquez (Chile)	
58	Alexandre Roque, Daniel Pohren, Carlos Eduardo Pereira and Edison Pignaton Freitas. <i>Communication Analysis in CAN Networks under EFT Injection</i>	Brazil
71	Hector Kaschel, Sergio Cordero and Eduardo Costoya. <i>Modelamiento y Simulación de predicción punto a zona en Televisión Digital, extensibles a otras tecnologías y su validación con mediciones reales</i>	Chile
73	Darwin Aguilar, Paola León, Jorge Alvarez, Carlos Aguilar and Stalin Martinez. <i>Evaluation and analysis of a prototype wireless sensor for monitoring critical infrastructures on bridges</i>	Ecuador
96	Nicolas Krommenacker, Oscar C. Vásquez, Miguel D. Alfaro and Ismael Soto. <i>A Self-Adaptive Cell-ID Positioning System Based on Visible Light Communications in Underground Mines</i>	France; Chile

17:30	Technical Session XXX: Education II	Country
#	Chair : Flavio Torres (Chile), Justin Noronha (USA)	
81	Marco Pilatasig, Sixto Reinoso, Amparo Meythaler, Armando Álvarez, Luis Mena, Brian Viteri and Edwin Pruna. <i>Implementation a Training Module for Teaching of Microcontroller AVR</i>	Ecuador
111	Flavio Torres. <i>Pneumatic and Electro-pneumatic in the same Bank for Teaching Engineering</i>	Chile
126	Marco Rivera and Sergio Toledo. <i>Recomendaciones para Escribir un Buen Articulo de Investigacion</i>	Chile
119	Justin Noronha and Nicola Elia. <i>A Swarm Control Platform for Educational and Research Applications</i>	USA

17:30	Technical Session XXXII: Industrial Engineering II	Country
#	Chair : Debora Aguirre (Chile), Rafael Mellado (Chile)	
85	Rafael Mellado Silva, Claudio Cubillos and Daniel Cabrera. <i>Flow-Shop Scheduling Problem applied to programming repair medical equipment</i>	Chile
131	Xiaoguo Liang, Jinsong Zhu and Yuan-Liang Li. <i>Study of PCB routing loss for Coupled Inductor based VR(Voltage Regulator) design in Server Computing System</i>	Taiwan
76	ChileDebora Aguirre, Ali Dehghan Firoozabadi, Fabian Seguel and Ismael Soto. <i>Proposed energy based method for light receiver localization in underground mining</i>	Chile
104	Diego Paul Chacón Troya, Paúl Andrés Chacón Jaramillo and Ricardo David Medina Velecela. <i>Characteristic Curves of High Consumption Domestic Appliances</i>	Ecuador