



Program Wednesday, October 19

14:00	Technical Session I: Power Systems I Sala 1	Country
#	Chair : Ricardo Medina (Argentina), Diego Morales (Ecuador)	
8	Ricardo Medina, Juan Pablo Lata, Wilson Borja and Diego X Morales. <i>Power Transformer Common Test Description for Condition Management</i>	Argentina; Ecuador
9	Cristina Bustamante, Bruno Mirabá, Luis Zhunio and Ricardo Medina. <i>Estado del arte – Índice de Riesgo en Transformadores de Potencia para la Gestión de Activos</i>	Ecuador; Argentina
18	Diego Morales, Daniel Icaza, Luis Lliguin, Santiago Melgar and Victor Vimos. <i>Determinación del grado de aceptación de Vehículos Eléctricos: Caso Estudio en un Transformador de Distribución Típico</i>	Ecuador
19	Diego Morales, Daniel Icaza, Pablo Flores, Flavio Conce, Genaro Conce, Ricardo Medina and Wilson Borja. <i>Ubicación Mejorada de Localizadores de Falla en Redes de Distribución Aéreas</i>	Ecuador

14:00	Technical Session II: Process Control I	Country
#	Chair : Juan C. Travieso (Chile), Jeferson Barros (Brazil)	
12	Jeferson Barros Alves, Israel Francisco Benitez Pina, Fabrício Guimarães de Oliveira and Miguel Angel Orellana Postigo. <i>System of fault tolerant to the liquid level control in two coupled reservoirs</i>	Brazil; Cuba
26	Juan Carlos Travieso-Torres, Manuel Armando Duarte-Mermoud and Orlando Beytía. <i>Experimental Comparison of Passivity-Based Controllers for the Level Regulation of a Conical Tank</i>	Chile
79	Edwin Pruna, Fabricio Bayas, Henry Cocha, Ivón Escobar, Andres Gordon and Patricia Constante. <i>Implementation of a simulator of industrial processes</i>	Ecuador
34	Edwin Pruna, Diego Bautista, Ivón Escobar, Julio Acosta and Jairo Cortez. <i>Training system for remote control of industrial processes</i>	Ecuador

14:00	Technical Session III: Biomedical Engineering I	Country
#	Chair : Miguel Bustamante (Chile), Marcelo Silva (Chile)	
101	Miguel Bustamante, Roman Osorio, Etienne Lefranc and Gaston Lefranc. <i>New Breast Cancer Detection Algorithm</i>	Chile México
113	Huber Nieto-Chaupis. <i>Classical Compton Scattering with High Intensity Twisted Fields</i>	Perú
115	Huber Nieto-Chaupis. <i>An E-Healthcare System to Prevent the Renal Disease of Diabetic Patients Belonging to Peri-urban Areas of Large Cities</i>	Perú
122	Víctor Hugo Andaluz, Carlos Bustamante, Miguel Escudero, Pablo Salazar and Marcelo Silva. <i>Rehabilitation of Upper Limb with Force Feedback</i>	Ecuador

14:00	Technical Session IV: Robotics I	Country
#	Chair : Rafael Kelly (México), Marcela Jamett (Chile)	
37	Rafael Kelly, Adriana Salinas and Carmen Monroy. <i>Position Regulation Under Position Dependent Speed Limit of a Torque-Driven Nonlinear Rotational Mechanism Model</i>	México
123	Tayyaba Qaisar and A Mahmood. <i>Structured Uncertainty Modeling, Analysis and Control of a Customized Robotic Arm.</i>	Pakistan
39	Rafael Kelly and Diana Diaz. <i>On linearization of a class of nonlinear vector implicit differential equation with application to robotics</i>	México
127	Mir Syavash Kazemi and Marcela Jamett. <i>Simulation and Evaluation of Neuro-Controllers Applied in a SCORBOT</i>	Chile

14:00	Technical Session V: Electrical Machinery I	Country
#	Chair : Pedro Melin (Chile), Jaime Rohten (Chile)	
1	Cosman Sorin Iulian and Claudia Martiș. <i>SRM Flux Linkage Profile Measurement and Estimation Methods</i>	Romania
15	Necibe Fusun Oyman Serteller and Dursun Ustundag. <i>Analysis of Dynamic Behavior of Direct Current Motor with Electrical Braking Techniques</i>	Turkey
128	Pedro Melin, Benjamin Larenas, Jeovanny Valenzuela, Jaime Rohten, Javier Riedemann and M. Nathalie Risso. <i>Multilevel Current-Source Converter based STATCOM using Minimum DC Current Level</i>	Chile; USA
147	Magno Ayala, Osvaldo Gonzalez, Jorge Rodas, Raul Gregor and Marco Rivera. <i>Predictive Control at Fixed Switching Frequency for a Dual Three-Phase Induction Machine with Kalman Filter-Based Rotor Estimator</i>	Paraguay; Chile

16:00	Technical Session VII: Power Systems II	Country
#	Chair : Luis Díaz (México) , Manuel Duarte (Chile)	
69	Manuel Duarte-Mermoud and Freddy Milla. <i>Model Predictive Power Stabilizer Optimized by PSO</i>	Chile
87	Luis Díaz Saldierna, Diego Langarica Cordoba, Jesús Leyva Ramos and Jorge Morales Saldaña. <i>Dynamical Modeling for a Fuel-Cell Based Power Generation System</i>	México
129	Daniel Guerrero, Karina A. Barbosa and Humberto Verdejo. <i>D-stability control design for algebraic differential systems with application in power systems</i>	Chile
90	Anna Moraco, Marley Tavares and Rodrigo Ramos. <i>Robustness Analysis of Extended Participation Factors to Detect Voltage Fluctuations in Distributed Synchronous Generation Systems</i>	Beazil

16:00	Technical Session VIII: Process Control II	Country
#	Chair : Marcela Jamett (Chile), Marco Fernández (Chile)	
63	Jacqueline Llanos, Marco Pilatasig, David Curay and Andrea Vaca. <i>Diseño e implementación de un Controlador Predictivo basado en Modelo MPC para una planta de control de presión</i>	Ecuador
72	Víctor Hugo Andaluz, Edwin Pruna, Luis Proaño, Christian P. Carvajal, Ivón Escobar and Marco Pilatásig. <i>Construction and Analysis of PID, Fuzzy and Predictive Controllers in Flow System</i>	Ecuador
64	Marco Fernandez, Claudio Valencia and Hector Kaschel. <i>A Distributed Brillouin Optical Sensor Simulation for Measuring Stress and Temperature.</i>	Chile
38	Sebastian Bongain and Marcela Jamett. <i>Electrohydraulic Active Suspension Neural-Based Control System</i>	Chile

16:00	Technical Session IX: Agrofood I	Country
#	Chair : Felipe Besoain (Chile), Nelson Silva (Brazil)	
74	Natalia Grandon, Roberto Ahumada, Jose Reyes-Suarez and Felipe Besoain. <i>Information System for Improving Local Productivity and Decision Making in Organic Beekeeping</i>	Chile
98	Roberto Ahumada-García, Carlos Poblete-Echeverría, Felipe Besoain and José Antonio Reyes-Suarez. <i>Inference of Foliar Temperature Profile of a Vineyard Using Integrated Sensors Into a Motorized Vehicle</i>	Chile
103	Juan Carlos Soto, Jessica Ruiz, William Ipanaque and Cesar Chinguel. <i>New hyperspectral index for determining the state of fermentation in the non-destructive analysis for organic cocoa violet</i>	Perú
16	Caio César Oba Ramos, Guilherme Clerice, Bruno Castro, Nelson Silva Filho and José A. C. Ulson. <i>Artificial Intelligent Techniques and Near-Infrared Spectroscopy for Nitrogen Content Identification in Sugar Cane Crops</i>	Brazil

16:00	Technical Session X: Robotics II	Country
#	Chair : Fausto Acuña (Ecuador), Mario Peña (México)	
40	Diana Diaz and Rafael Kelly. <i>On modeling and position tracking control of the generalized differential driven wheeled mobile robot</i>	México
57	Fausto Acuña, Marco Singaña, Fernanda Oñate, Verónica Valdés and Milton Bustillos. <i>Humanoid interpreter for teaching basic sign language</i>	Ecuador
68	Roman Osorio-Comparán, Ismael Lopez-Uarez, Mario Peña, Gaston Lefranc, Miguel Bustamante and Alfredo Reyes-Acosta. <i>Navegación de un Robot Móvil empleando Campos Potenciales y LMA</i>	México; Chile
77	Mario Peña, Joel Duran, Victor Lomas, Roman Osorio, Gaston Lefranc, Jean Carlo Andrade and Ignacio López. <i>Caracterización y control del desplazamiento de una plataforma omnidireccional</i>	México; Chile

16:00	Technical Session XI: Software Engineering I	Country
#	Chair : John Castro (Chile), Jairo Riaña (Colombia)	
44	Daniel A. Magües, John W. Castro and Silvia T. Acuña. <i>HCI Usability Techniques in Agile Development</i>	Spain; Chile
45	Jairo Armando Riaño Herrera, Javier Antonio Ballesteros Ricaurte and Carlos Medina Riaño. <i>Análisis de Resultados del proceso de validación Accesibilidad web en sitios de Gobierno en Línea en Colombia</i>	Colombia
60	Eddy Mauricio Suárez Molina, Miguel Ángel Barrera Pérez and Edwar Jacinto Gómez. <i>LITERARY BRAILLE LANGUAGE TRANSLATOR TO SPANISH TEXT</i>	Colombia
22	Dan Li, Jianqiu Zhang, Hu Bo, Tao Yang and Qiyong Lu. <i>An approach to accurately measuring capacitance with a distorted sinusoidal stimulus signal</i>	China

17:30	Technical sessionXII:	
#	Chair : Héctor Chávez (Chile), Enrique López (Chile)	
89	Tomás Avila and Hector Chavez. <i>Secondary reserves determination based on CPS1 and CPS2 compliant AGC operation</i>	Chile
105	Sebastian Sanhueza and Héctor Chávez. <i>CPS1-Complaint Economic Dispatch for a Single Balancing Authority System Including Ramp Rate</i>	Chile
109	Marco Castro and Héctor Chávez. <i>Representación de la dinámica de la carga en el despacho de reservas primarias</i>	Chile
136	Eduardo Arriagada, Enrique López, Miguel Lopez, Rodrigo López, Gastón Lefranc and Michel Poloujadoff. <i>A Probabilistic, Emission and Economic Dispatch Model Considering Renewable Energy, Demand and Generator Uncertainties: A Real Application</i>	Chile; Francia

17:30	Technical Session XIII: Process Control III	
#	Chair : Ricardo Pérez (Chile), William Ipanaqué (Perú)	
93	William Ipanaqué, Julio Salazar and César Belupú. <i>Implementation of an architecture of digital control in FPGA commanded from an Embedded Java Application</i>	Perú
106	Simón Díaz, Ricardo Pérez-Correa, Mario Fernández-Fernández and Aldo Cipriano. <i>Intelligent Control applications on a Binary Distillation Column</i>	Chile
112	José Leonardo Benavides Maldonado, Henry Paz, Fabricio Alvarado Romero and José Cuenca Granda. <i>Intelligent Systems applied to the control of a Distilling Binary Column</i>	Ecuador
70	Franklin Silva, Washington Freire and Marco Pilatasig. <i>Eficiencia energética en el proceso de molienda de productos deshidratados, con molino de martillos</i>	Ecuador

17:30	Technical Session XIV: Agrofood II	
#	Chair : Eswin Pruna (Ecuador), Carlos Muñoz (Chile)	
121	Víctor Hugo Andaluz, Andrea Y. Tovar, Kevin D. Bedón, Jessica S. Ortiz and Edwin Pruna. <i>Automatic Control of Drip Irrigation on Hydroponic Agriculture: Daniela Tomato Production</i>	Chile
102	Patricia Möller-Acuña, Roberto Ahumada-García and Jose Antonio Reyes-Suarez. <i>Prediction of Frost Episodes Based in Agrometeorological Information and Machine Learning Techniques</i>	Ecuador
117	Pablo Parra Rosero, William Ipanaqué Alama, José Manrique Silupu and José Oliden Semino. <i>Temperature Nonlinear Model Predictive Controller (NMPC) for a Dryer Plant of Cocoa Beans.</i>	Perú; Ecuador
141	Nicolás Roa and Carlos Muñoz. <i>Automatic detectors for walking state in cows using SVM based on IMU's installed on ear-tag and collars</i>	Chile

17:30	Technical Session XV: Robotics III	Country
#	Chair : Luis Orozco (Ecuador), Ernesto Paiva (Perú)	
92	Fernando Javier Mendiburu, Antonio Marcus Nogueira Lima and Marcos Ricardo Alcantara Morais. <i>Behavior coordination in multi-robot systems</i>	Brazil
53	Alexis Sánchez, Andrés Terán, Alexander Ibarra, Lenin Abatta, Darwin Alulema, Derlin Morocho and Francisco Encalada. <i>Design and Construction of an Anthropomorphic Robotic Arm of Seven Degrees of Freedom with Kinematic and Dynamic Analysis based on Genetic Algorithms.</i>	Ecuador
94	Ernesto Paiva, Juan Soto, Julio Salinas and William Ipanaqué. <i>Modeling, Simulation and Implementation of a modified PID Controller for stabilizing a Quadcopter</i>	Perú
52	Luis Orozco, Franklin Coloma, Coleman Oyos, Darwin Alulema, Derlin Morocho and Francisco Encalada. <i>Design and Implementation of a Control of Position System for the Quadricopter AR. Drone 2.0 by Parrot</i>	Ecuador

17:30	Technical Session XVI: Software Engineering II	Country
#	Chair : María Tombolini (Chile), Mauricio Macías (Chile)	
88	Mauricio Macías, Cristián Barría Huidobro, Claudio Cubillos and Alejandra Acuña. <i>APOYO AL SGSI POR MEDIO DE LA CLASIFICACIÓN DE MALWARE EMPLEANDO ANÁLISIS DE PATRONES.</i>	Chile
6	Muhammad Mazhar Ullah Rathore, Awais Ahmad and Anand Paul. <i>IoT-Based Smart City Development using Big Data Analytical Approach</i>	Korea
24	Jorge Cornejo. <i>Métodos Ágiles y Metodología A+S en la enseñanza de Ingeniería de software</i>	Chile
83	María Valentina Tobolini Echeverría, Senen Gonzalez Cornejo and Francisco Alarcón Pontigo. <i>Development of an information platform for observation of seismic events in Chile using RAD methodology.</i>	Chile