ICELIE CONFERENCE 18 of October 2022

The Arc

10:00	**Welcome and ICELIE opening** *Larisa Dunai Dunai* Universitat Politecnica de Valencia (Spain) and *Kazuhiro Umetani* Okayama University (Japan) Invited speaker **Prof. Hamadou SALIAH-HASSANE**
10:30-11:26	**TOOLS AND PLATFORMS**
	Simulation and Design of Control Systems: A Rapid Software Prototyping Class for Mechanical Engineering Students *Martin Novak*
	HeLiWi - Open source and low cost STEM approach for educational purposes *Maarten Dequanter,Hendrik Dequanter,Lies Dequanter,Willem Dequanter,An Braeken*
	Educational software-as-a-service based on JupyterHub and nbgrader running on Kubernetes *Ruben De Smet,Steffen Thielemans,Jan Lemeire,An Braeken,Kris Steenhaut*
	Integrating different modelling formalisms supporting co-design development of controllers for cyber-physical systems - a case study *Grzegorz Bazydlo,Aniko Costa,Luis Gomes*
	Interactivity – A Key Element of Blended Learning with Flipped Classroom Approach *Andrzej Ozadowicz*
	Modeling of Six-Phase Induction Machine with Two Isolated Neutrals under One Open Phase Fault *Wan Noraishah Wan Abdul Munim,Hang Seng Che,Mahdi Tousizadeh,Rahimi Baharom,Khairul Safuan Muhammad*
1:26-12:30	**HYBRID LEARNING**
	All quiet on the COVID-19 front! – Real experience must be bought for power electronics beginners *–Takaaki Ibuchi,Tsuyoshi Funaki*
	Diploma Projects for LAB Equipment Rental - How Students Can Help University in the Covid-19 Era *Waldemar Bauer,Katarzyna Grobler-Dębska,Edyta Kucharska,Jerzy Baranowski*
	An Education Seminar Utilizing Both Experiments and e-Learning for Beginners in the Power Electronics Field *Hidemine Obara,Atsuo Kawamura*
	Hybrid and Online Learning during Covid-19; a show case study of Universitat Politecnica de Valencia *Dunai Larisa, Nuria Aleixos, Francisco Eugenio Albert Gil, Benyamin Soleimani*
14:30-15:06	**ONLINE LEARNING**
	Solution-Oriented Teaching Method of Electric Power Circuit Design for Online On-demand Video Streaming Lecture Course *Kazuhiro Umetani,Masataka Ishihara, Eiji Hiraki*
	Proposal of a DX method for lathe operation practical training with respect to motivation and an operative sense of agency *Ken-ichi Tabei,Yukihiro ITO,Hiroshi SAITO,Masafumi KIMIZUKA,Hiroshi Hashimoto*
	Differences in Visibility of Students' Proficiency by Grading Methods in Energy Electronics-related Lectures Based on DX Format *Eiji Hiraki,Masataka Ishihara,Kazuhiro Umetani*
	How to Teach Fractional Calculus Inspired Electronics Remotely? *Waldemar Bauer,Edyta Kucharska,Jerzy Baranowski,Stavroula Kapoulea,Panagiotis Bertsias,Costas Psychalinos*
15:06-17:50	**SS1 NEW TOOLS AND METHODS FOR ELECTRIC MACHINES AND DRIVES AND POWER ELECTRONICS EDUCATION**
	Bond graph-based teaching method to enhance the synergy of mechatronics in LabVIEW *Zenan Guo,Peter Szemes,Peter Korondi*
	Development of a web based laboratory system for mechatronical engineering students *Gyula Korsoveczki,Benjamin Kovács,Dániel Tihanyi,Peter Korondi*
	Software tool for training on electric motors condition monitoring *Jose Antonino Daviu,Dunai Larisa*
	A Power Electronics Laboratory Based on Red Pitaya Board *Ciprian - Marian Stan,Dorin Neacsu*
	Sensorless Based Gravity Torque Estimation and Friction Compensation for Surgical Robotic System *Branesh M Pillai,Dileep Sivaraman,Songpol Ongwattanakul,Jackrit Suthakorn*
	Sine Averaging and Duty Ratio Approach PWM Techniques at Low Switching Frequencies *Pratik KalkaL,A. V. Ravi Teja,Pankaj Kumar Meena, Neha Meena*
17:50-18:00	**Closing speech** *Kazuhiro Umetani* **Best paper Award**