



23rd International Symposium on
POWER ELECTRONICS Ee 2025

Program

Belgrade, Serbian Academy of Sciences and Arts / Chamber of Commerce and Industry of Serbia (CCIS)
Novi Sad, Hotel Novi Sad

Belgrade & Novi Sad, Serbia
October 8th - 10th, 2025

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7 Oct. 2025.

Tuesday

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
Tuesday, 7 Oct. 2025.						
Venue: Serbian Academy of Sciences and Arts Gallery (SASA Gallery), Djure Jakšića 2, Belgrade						
09:45 - 10:00h			OPENING OF THE TUTORIALS		SASA Gallery	
		Chair:	Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
09:45h			Opening speech, Prof. Vladimir Katić, Univ. of Novi Sad & President of the Power Electronics Soc. of Serbia, Novi Sad, Serbia			
10:00 - 13:00h		TT-2	Tutorial 2 (Coffee Break at 11:30h)			SASA Gallery
		Chair:	Nikola Mirković, Nikola Tesla Institute of Electrical Engineering, Belgrade, Serbia			
10:00h		TT-2	Wireless Electric Vehicle (EV) Chargers – Challenges and Solutions			
			Vasić	Miroslav	Universidad Politecnica de Madrid, Center for Industrial Electronics Madrid	Spain
			Mirković	Nikola	Nikola Tesla Institute of Electrical Engineering, Belgrade	Serbia
15:00 - 18:00h		TT-1	Tutorial 1 (Coffee Break at 16:30h)			SASA Gallery
		Chair:	Petar Grbovic, University of Innsbruck, Innsbruck, Austria			
15:00h		TT-1	Partial Power Processing Converters: <i>The Myth, Reality and Proper Implementation of a Groundbreaking Concept</i>			
			Grbović	Petar J.	University of Innsbruck, Innsbruck Power Electronics Lab. (i-PEL)	Austria
			Meynard	Thierry A.	Université de Toulouse, LAPLACE/ ENSEIHT / INPT/, Toulouse	France

8 Oct. 2025.

Wednesday

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
Venue: Belgrade, Serbian Academy of Sciences and Arts (SASA), Knez Mihajlova 35, Belgrade						
08:30h			BELGRADE (SASA) Registration desk opens			
09:00h		SESSION -T1.1	Power Converters and devices			SASA - Ceremonial Hall
		Chair:	Prof. Goce Arsov, SS Cyril and Methodius University, Skopje, North Macedonia			
		Co-chair:	Nikola Mirković, Nikola Tesla Institute of Electrical Engineering, Belgrade, Serbia			
09:00h	01744	T1.1-1	Digital Twinning for Power Converter Temperature Monitoring			
			Ríos Linares	Daniel	Universidad Politécnica de Madrid	Spain
			Mo	Xianghao	Universidad Politécnica de Madrid	China
			Ramos	Regina	Universidad Politécnica de Madrid	Spain
			Vasić	Miroslav	Universidad Politécnica de Madrid	Spain
09:15h	00844	T1.1-2	A Multiport Transistor Characterisation Technique Including Mutual Inductances using 2-port VNA			
			Kolodziej	Kacper	Univ. Claude Bernard Lyon 1, INSA Lyon	France
			Baffreau	Stephane	Univ. de Tech. de Tarbes Occitanie Pyrenees, Laboratoire Genie de Production	France
			Vidal	Paul-Etienne	Univ. de Tech. de Tarbes Occitanie Pyrenees, Laboratoire Genie de Production	France
			Allard	Bruno	Univ. Claude Bernard Lyon 1, INSA Lyon	France
09:30h	01044	T1.1-3	Design of a multiphase DC-DC converter for online PV panel characterization			
			Pavon-Vargas	Carlos	Università degli Studi di Salerno	Italy
			Bouvier	Yann E.	Universidad Rey Juan Carlos	Spain
			Rodríguez-Lorente	Alba	Universidad Rey Juan Carlos	Spain
			Curcio	Salvatore	Bitron S.p.A	Italy
			Petrone	Giovanni	Università degli Studi di Salerno	Italy
09:45h	01544	T1.1-4	3-level Boost Converter Control for a Discontinuous Current Mode			
			Grishin	Sevastyan	Moscow Power Engineering Institute	Russian Federation
			Stolyarov	Evgeniy	Moscow Power Engineering Institute	Russian Federation
			Fedorova	Ksenia	Moscow Power Engineering Institute	Russian Federation
			Yuan	Xibo	China University of Mining and Technology	China
			Kulik	Egor	Moscow Power Engineering Institute	Russian Federation
			Anuchin	Alecksey	Moscow Power Engineering Institute	Russian Federation
10:00h	00344	T1.1-5	Negative Voltage Pulse Generator with DC Bias for Electroporation			
			Shershunova	Ekaterina	Institute for Electrophysics and Electric Power of Russian Academy of Sciences	Russian Federation
10:15h	02044	T1.1-6	Simulation of Three-Level Architectures with a View to Power Module Integration			
			Leye	Babacar	Université de Technologie de Tarbes Occitanie Pyrénées	France
			Vine	Guillaume	Université de Technologie de Tarbes Occitanie Pyrénées	France
			Vidal	Paul-Etienne	Université de Technologie de Tarbes Occitanie Pyrénées	France
			Gopishetti	Anusha	DeepConcept	France
			Ali	Marwan	Safran Tech	France
09:00h		SESSION -T3.1	Advanced Control Systems, Measurement, and Artificial Intelligence (AI) applications			SASA - Hall 2
		Chair:	Dejan Jerkan, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
		Co-chair:	Đorđe Stojić, Nikola Tesla Institute of Electrical Engineering, Belgrade, Serbia			
09:00h	00244	T3.1-1	Adaptive Notch Prefilter Based PLL Operating in Adverse Grid Conditions			
			Stojic	Djordje	Nikola Tesla Institute of Electrical Engineering	Serbia
09:15h	02544	T3.1-2	Genetic Algorithm-Based Parameter Estimation of an Induction Motor Equivalent Circuit			
			Jarić	Milica	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Vukosavljević	Saša	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Marčetić	Darko	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Popović	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Jerkan	Dejan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Reljić	Dejan	University of Novi Sad, Faculty of Technical Sciences	Serbia
09:30h	02644	T3.1-3	Robust Current-Limited Voltage Controller for Buck Converter Using Discrete Sliding Mode Design			
			Ahmethodžić	Lejla	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Huseinbegović	Senad	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
09:45h	03244	T3.1-4	Algorithm for Auto-tuning of PID Current Regulators for Power Converters with Unknown Load Parameters			
			Bižić	Dušan	University of Belgrade, School of Electrical Engineering	Serbia
			Milić	Aleksandar	University of Belgrade, School of Electrical Engineering	Serbia
			Vasić	Miroslav	Universidad Politécnica de Madrid	Spain
10:00h	04544	T3.1-5	Parameter identification of Fractional-order Battery Model using Single-objective Optimization			
			Koledin	Nebojša	Università degli Studi di Messina, Dipartimento di Ingegneria	Italy
			Cvetičanin	Stevan	University of Novi Sad, Faculty of Technical Science	Serbia
			Caponetto	Riccardo	Università degli Studi di Messina, Dipartimento di Ingegneria	Italy
			Branciforte	Marco	STMicroelectronics	Italy
			Bonaccorso	Filippo	STMicroelectronics	Italy



Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
09:00h	SESSION -T4.1		Power Electronics in Smart Grids, and Energy Storage			SASA - Hall 3
			Chair: Dragan Jovčić, University of Aberdeen, Aberdeen, U.K.			
			Co-chair: Ružica Cvetanović, Innovation Center of the School of Electrical Engineering, Belgrade, Serbia			
09:00h	01444	T4.1-1	All-Port Underminated Small-Signal Stability Analysis of Multi-Port Grid-Connecting Converters			
			Cvetanović	Ružica	Innovation Center of the School of Electrical Engineering in Belgrade	Serbia
			Petrić	Ivan	Hanwha Q CELLS Technologies Inc.	United States
			Mattavelli	Paolo	University of Padova	Italy
			Buso	Simone	University of Padova	Italy
09:15h	02744	T4.1-2	Smart AC-DC Hybrid Grid Power Converter for Increased Grid Resilience			
			Banjac	Anja	Austrian Institute of Technology GmbH	Austria
			Tarraso	Andres	Austrian Institute of Technology GmbH	Austria
			Tremmel	Werner	Austrian Institute of Technology GmbH	Austria
			Stöckl	Johannes	Austrian Institute of Technology GmbH	Austria
			Miletic	Zoran	Austrian Institute of Technology GmbH	Austria
09:30h	06144	T4.1-3	Bidirectional Power Equalizer for DC Grids			
			Hogervorst	Nico	The Hague University of Applied Sciences	Netherlands
			Zuidervliet	Diego	The Hague University of Applied Sciences	Netherlands
			Lascu	Dan	Universitatea Politehnica Timisoara	Romania
			van Duijzen	Peter	The Hague University of Applied Sciences	Netherlands
09:45h	SESSION -T6.1		Renewable & distributed energy sources			SASA - Hall 3
			Chair: Dragan Jovčić, University of Aberdeen, Aberdeen, U.K.			
			Co-chair: Ružica Cvetanović, Innovation Center of the School of Electrical Engineering, Belgrade, Serbia			
09:45h	01644	T6.1-1	Feasibility of DC current commutation in capacitive circuit with 12kV DC CB			
			Shehu	Ibrahim	University of Aberdeen	United Kingdom
			Jovcic	Dragan	University of Aberdeen	United Kingdom
			Osborne	Richard	University of Aberdeen	United Kingdom
10:00h	01844	T6.1-2	Thomson coil equivalent electrical circuit model and identification of parameters			
			Jovcic	Dragan	Univeristy of Aberdeen	United Kingdom
			Shehu	Ibrahim	Univeristy of Aberdeen	United Kingdom
10:15h	01344	T6.1-3	Performance Exploration of Black-Start Block Loads Pick-up Sequences for Grid-Forming Dominated Systems			
			Yao	Lingjun	Zhejiang University	China
			Yuan	Yunuo	Zhejiang University	China
			Yang	Yongheng	Zhejiang University	China
			Blaabjerg	Frede	Aalborg University	Denmark
10:30 - 11:00h	Coffee Break					
11:00h	PLENARY Session		OPENING OF THE CONFERENCE			SASA - Ceremonial Hall
			Chair: Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
			Co-chair: Prof. Dushan Boroyevich, Virginia Polytechnic Institute and State University, Blacksburg, United States			
			Co-chair: Academician Prof. Slobodan Vukosavić, University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade, Serbia			
			Opening speech, Prof. Vladimir Katić, University of Novi Sad & President of the Power Electronics Soc. of Serbia, Novi Sad, Serbia			
			Welcome speech, Academician Prof. Zoran Popović, Vice president of the Serbian Academy of Sciences and Arts, Belgrade, Serbia			
			Welcome speech, Academician Prof. Slobodan Vukosavić, President of the Department of Technical Sciences SASA, Belgrade, Serbia			
			Welcome speeches, Representative of the organizers			
			Welcome speech, Dr Nikola Čelanović, Founder and CEO, Typhoon HIL, Novi Sad, Serbia			
			Prof. Vladimir Katić, A Brief Overview of the Ee 2025 Program			
11:30h	PLENARY Session - KN1		KEY-NOTE PAPERS			SASA - Ceremonial Hall
			Chair: Prof. Dushan Boroyevich, Virginia Polytechnic Institute and State University, Blacksburg, United States			
			Co-chair: Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia			
11:30h		KN1.1	Power system stability with a high penetration of inverter-based resources			
			Green	Tim	Imperial College London, Energy Futures Lab	United Kingdom
12:00h		KN1.2	Minerals for green-agenda power conversion, problems and solutions			
			Vukosavić	Slobodan	University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade	Serbia
12:30 - 12:45h	Coffee Break					
12:45h	PLENARY Session - KN2		KEY-NOTE PAPERS			SASA - Ceremonial Hall
			Chair: Academician Prof. Slobodan Vukosavić, University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade, Serbia			
			Co-chair: Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia			
12:45h		KN2.1	Status and Trends of Electrification of Railway Transportation			
			Yongdong	Li	Tsinghua University, Beijing	China
13:15h		KN2.2	A Holistic Approach to Traction Motor Design			
			Anuchin	Alecksey	Moscow Power Engineering Institute, Moscow	Russian Federation
			Prakht	Vladimir	Ural Federal University	Russian Federation
13:45h		KN2.3	Wires and Code: A Once-in-Multiple-Generations Opportunity for Technical and Business Innovation			
			Čelanović	Nikola	Typhoon HIL GmbH, Wettingen	Switzerland
14:15h - 15:00h	LUNCH BREAK					
15:00h	SESSION -T1.2		Power Converters and devices			SASA - Ceremonial Hall
			Chair: Leposava Ristić, University of Belgrade, School of Electrical Engineering, Belgrade, Serbia			
			Co-chair: Dr Žarko Janda, Nikola Tesla Institute of Electrical Engineering, Belgrade, Serbia			
15:00h	02144	T1.2-1	Analytic review of V/f strategy-based control methods for PMSM and their applications			
			Butaru	Florinel	University Politehnica Timisoara	Romania
			Musuroi	Sorin	University Politehnica Timisoara	Romania
			Svoboda	Marcus	University Politehnica Timisoara	Romania
			Roman	Raul-Cristian	University Politehnica Timisoara	Romania
			Sorandaru	Ciprian	University Politehnica Timisoara	Romania
			Martin	Adrian Daniel	University Politehnica Timisoara	Romania
15:15h	02244	T1.2-2	An Interleaved Three-Level Double-Dual-Boost Flying-Capacitor converter with wide voltage range			
			Hulea	Dan	Politehnica University Timisoara	Romania
			Pundt	Dustin	The University of Texas at Dallas	United States
			Fahimi	Babak	The University of Texas at Dallas	United States

Wednesday

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
15:30h	02344	T1.2-3	Power Loss Estimation in a Modular Multilevel Rectifier			
			Mijajlović	Anita	University of Belgrade, School of Electrical Engineering	Serbia
			De Paula García López	Francisco	University of Seville, Department of Electrical Engineering	Spain
			Majstorović	Milovan	University of Belgrade, School of Electrical Engineering	Serbia
			Barragán-Villarejo	Manuel	University of Seville, Department of Electrical Engineering	Spain
			Brković	Bogdan	University of Belgrade, School of Electrical Engineering	Serbia
			María Maza-Ortega	José	University of Seville, Department of Electrical Engineering	Spain
			Ristić	Leposava	University of Belgrade, School of Electrical Engineering	Serbia
15:45h	02444	T1.2-4	Improved Reluctance-Based Model for Four-Phase Symmetric Coupled Inductors			
			Lazarević	Marko	University of Belgrade, School of Electrical Engineering	Serbia
			Milić	Aleksandar	University of Belgrade, School of Electrical Engineering	Serbia
			Mirković	Nikola	University of Belgrade, School of Electrical Engineering	Serbia
			Vasić	Miroslav	Polytechnic University of Madrid	Spain
16:00h	02944	T1.2-5	Pulsed Power Load Magnetic Component Design Considering Thermal Behaviour			
			Bouvier	Yann	Universidad Rey Juan Carlos	Spain
			Pavon-Vargas	Carlos	Università degli Studi di Salerno	Italy
			Garcia-Pereira	Hilel	Universidad Rey Juan Carlos	Spain
			Williams	Sydney	Universidad Rey Juan Carlos	Spain
16:15h	03044	T1.2-6	Online Optimal Deadtime Estimation for GaN Based Half-Bridge Topologies			
			Popović	Miroslav	University of Belgrade, School of Electrical Engineering	Serbia
			Milić	Aleksandar	University of Belgrade, School of Electrical Engineering	Serbia
			Mirković	Nikola	Nikola Tesla Institute of Electrical Engineering	Serbia
			Vasić	Miroslav	Polytechnic University of Madrid	Spain
15:00h	SESSION -T1.3 Power Converters and devices					SASA - Hall 2
			Chair:	Prof. Dushan Boroyevich, Virginia Polytechnic Institute and State University, Blacksburg, United States		
			Co-chair:	Prof. Milutin Petronijević, University of Niš, Niš, Serbia		
15:00h	04344	T1.3-1	Solar Powered Resonant Electromagnetic Vibratory Conveyor			
			Jović	Milan	The Academy of Applied Studies Polytechnic	Serbia
			Despotović	Zeljko V.	University of Belgrade, Institute Mihailo Pupin	Serbia
			Ilic	Uros	University of Belgrade, Institute Mihailo Pupin	Serbia
15:15h	04444	T1.3-2	Control of Interleaved Buck Converter with Natural Zero Voltage Switching			
			Cvejić	Filip	Rosef Engineering	Serbia
			Cvetanović	Ružica	Innovation Center of the School of Electrical Engineering in Belgrade	Serbia
			Pejović	Predrag	University of Belgrade, School of Electrical Engineering	Serbia
15:30h	04644	T1.3-3	A Generalized Control Method for Constant Switching Frequency Three Phase PWM Boost Type Rectifier under Extreme Unbalanced Operation Conditions			
			Stankovic	Ana	Cleveland State University	United States
			Upadhyay	Abhishek	Cleveland State University	United States
15:45h	06244	T1.3-4	Graph-Theory Based Digital Twin Modeling of Cascaded Multilevel Inverters			
			Gajip	Selmir	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Martinović	T.	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Huseinbegović	Senad	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Smajkić	Amer	University of Sarajevo, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Čalasan	Martin	University of Montenegro, Faculty of Electrical Engineering	Montenegro
			Petronijević	Milutin	University of Niš, Faculty of Electronic Engineering	Serbia
16:00h	06344	T1.3-5	Design and Implementation of a Voltage-Mode Controlled Buck Converter for Battery-Powered Portable Devices			
			Hernandez	Raul	San Diego State University	United States
			Sabzehgar	Reza	San Diego State University	United States
			Rasouli	Mohammad	University of North Dakota	United States
			Fajri	Poria	University of Nevada Reno	United States
16:15h	06544	T1.3-6	Switch Mode Power Supply for USB-C Power Delivery Applications			
			Curley	Jack	San Diego State University	United States
			Swierczewski	Brendon	San Diego State University	United States
			Sabzehgar	Reza	San Diego State University	United States
			Rasouli	Mohammad	University of North Dakota	United States
			Fajri	Poria	University of Nevada Reno	United States
15:00h	SESSION -T2.1 Electric vehicles, Industrial drives, and electric machin					SASA - Hall 3
			Chair:	Prof. Milan Bebić, University of Belgrade, School of Electrical Engineering, Belgrade, Serbia		
			Co-chair:	Željko Despotović, University of Belgrade, Institute Mihailo Pupin, Belgrade, Serbia		
15:00h	02844	T2.1-1	Inherent Operating Mode of the Converter with Shared Inverter Phases			
			Mihić	Dragan	University of Belgrade, School of Electrical Engineering	Serbia
			Terzić	Mladen	University of Belgrade, School of Electrical Engineering	Serbia
15:15h	03744	T2.1-2	Mathematical Modelling and Simulation of an Electromagnetic Vibratory Actuator			
			Ilić	Uroš	University of Belgrade, Institute Mihajlo Pupin	Serbia
			Despotović	Željko V.	University of Belgrade, Institute Mihajlo Pupin	Serbia
			Lazarević	Mihailo	University of Belgrade, Faculty of Mechanical Engineering	Serbia
			Veg	Emil	University of Belgrade, Faculty of Mechanical Engineering	Serbia
15:30h	SESSION -T3.2 Advanced Control Systems, Measurement, and Artificial Intelligence (AI) applications					SASA - Hall 3
			Chair:	Prof. Milan Bebić, University of Belgrade, School of Electrical Engineering, Belgrade, Serbia		
			Co-chair:	Željko Despotović, University of Belgrade, Institute Mihailo Pupin, Belgrade, Serbia		
15:30h	05244	T3.2-1	Analytical description of simple synchronous optimal voltage pulse patterns for three-phase inverters			
			Hahn	Ingo	Friedrich-Alexander-Universität Erlangen-Nürnberg	Germany
15:45h	05344	T3.2-2	Data-Driven Prediction of Unknown Power Electronic Systems Using a Self-Organizing Adaptive Deep Belief Network			
			Babalou	Milad	Aalto University, Department of Electrical Engineering and Automation	Finland
			Pouresmaeil	Mobina	Drives ABB Oy	Finland
			Taheri	Shamsodin	Université de Québec en Outaouais, Department of Computer Science and Engineering	Canada
			Pouresmaeil	Edris	Aalto University, Department of Electrical Engineering and Automation	Finland



Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
16:00h	SESSION -T6.2		Renewable & distributed energy sources			SASA - Hall 3
			Chair:	Prof. Milan Bebić, University of Belgrade, School of Electrical Engineering, Belgrade, Serbia		
			Co-chair:	Željko Despotović, University of Belgrade, Institute Mihailo Pupin, Belgrade, Serbia		
16:00h	01944	T6.2-1	Protection Design of Current Source Converter-based Series-Parallel DC Wind Farm	Shehu Ibrahim	Univeristy of Aberdeen	United Kingdom
				Jovcic Dragan	Univeristy of Aberdeen	United Kingdom
16:15h	05044	T6.2-2	Enhancing Distribution Network Efficiency through DC link and PV Integration: Case Studies on IEEE 33-Bus and Montenegro Distribution Network	Aleksić Ilija	University of Montenegro, Faculty of Electrical Engineering	Montenegro
				Durković Vladan	University of Montenegro, Faculty of Electrical Engineering	Montenegro
				Radulović Vladan	University of Montenegro, Faculty of Electrical Engineering	Montenegro
16:30 - 16:45h	REFRESHMENT BREAK					
16:45h	SESSION -T1.4		Power Converters and devices			SASA - Ceremonial Hall
			Chair:	Prof. Goce Arsov, SS Cyril and Methodius University, Skopje, North Macedonia		
			Co-chair:	Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia		
16:45h	03144	T1.4-1	Field-Effect Transistor: A Century since the First Concept	Arsov Goce	SS Cyril and Methodius University, Faculty of Electrical Engineering and IT, Skopje	North Macedonia
17:00h	03344	T1.4-2	Design of a High-Frequency Solid-State Transformer for DAB: A Comprehensive Analytical and Simulation-Based Approach	Demidova Galina	Moscow Power Engineering Institute	Russian Federation
				Lesukov Nikita	ITMO University	Russian Federation
				Poliakov Nikolai	ITMO University	Russian Federation
				Lukichev Dmitry	ITMO University	Russian Federation
				Mamatov Aleksandr	ITMO University	Russian Federation
				Anuchin Alecksey	Moscow Power Engineering Institute	Russian Federation
17:15h	03544	T1.4-3	Digital Average Current Control Implementation and Stability Analysis for Interleaved Converter	Gaspersions Kristians	Riga Technical University	Latvia
				Kroics Kaspars	Riga Technical University	Latvia
17:30h	03644	T1.4-4	Half-Bridge VSI Control Unit Development Based on ATmega2560: CHIL Methodology Validation	Brandis Andrej	The Faculty of Electrical Engineering, Computer Science and Information Technology Osijek	Croatia
				Knol Kristian	The Faculty of Electrical Engineering, Computer Science and Information Technology Osijek	Croatia
				Pelin Denis	The Faculty of Electrical Engineering, Computer Science and Information Technology Osijek	Croatia
				Bedeković Robert	HEP – Operator distribucijskog sustava d.o.o.	Croatia
17:45h	03844	T1.4-5	Topology-Optimized, Additively Manufactured Passive Heat Sink: Design and Experimental Validation for Next-Generation High-Density Power Converters	Fuchs Lorenz	University of Innsbruck, Faculty of Engineering Sciences, Dep. of Mechatronics, Materials Science	Austria
				Hanschek Andreas J.	University of Innsbruck, Faculty of Engineering Sciences, Innsbruck Power Electronics Lab. (i-PEL)	Austria
				Speicher Sam	University of Innsbruck, Faculty of Engineering Sciences, Dep. of Mechatronics, Materials Science	Austria
				Kaserer Lukas	University of Innsbruck, Faculty of Engineering Sciences, Dep. of Mechatronics, Materials Science	Austria
				Grbovic Petar J.	University of Innsbruck, Faculty of Engineering Sciences, Innsbruck Power Electronics Lab. (i-PEL)	Austria
18:00h	03944	T1.4-6	Manufacturing Tests of an MV Cascaded Frequency Converter	Balashenko Nikita	JSC "Power machines	Russian Federation
				Sidorov Kirill	Moscow Power Engineering Institute	Russian Federation
				Anuchin Alecksey	Moscow Power Engineering Institute	Russian Federation
				Gorbunov Nikita	Moscow Power Engineering Institute	Russian Federation
				Garmashova Valeria	Moscow Power Engineering Institute	Russian Federation
				Kazemirova Yulia	Moscow Power Engineering Institute	Russian Federation
16:45h	SESSION -T2.2		Electric vehicles, Industrial drives, and electric machin			SASA - Hall 2
			Chair:	Prof. Alecksey Anuchin, Moscow Power Engineering Institute, Moscow, Russia		
			Co-chair:	Prof. Dejan Jerkan, University of Novi Sad, Faculty of Technical Science, Novi Sad, Serbia		
16:45h	03444	T2.2-1	Harmonic Content of DC-Link Current in Three-Phase VSIs Supplying Induction Machines	Kovačević Aleksandra	University of Novi Sad, Faculty of Technical Science	Serbia
				Vasić Veran	University of Novi Sad, Faculty of Technical Science	Serbia
				Reljić Dejan	University of Novi Sad, Faculty of Technical Science	Serbia
				Jerkan Dejan	University of Novi Sad, Faculty of Technical Science	Serbia
17:00h	04844	T2.2-2	Analytical Modeling of IPMSM Flux Maps Using Hyperbolic and Gaussian Prototype Functions	Rajčević Jovan	University of Novi Sad, Faculty of Technical Science	Serbia
				Vasić Veran	University of Novi Sad, Faculty of Technical Scienc	Serbia
				Vučković Mladen	University of Novi Sad, Faculty of Technical Scienc	Serbia
				Novaković Đorđe	University of Novi Sad, Faculty of Technical Scienc	Serbia
				Popović Vladimir	University of Novi Sad, Faculty of Technical Scienc	Serbia
				Jerkan Dejan	University of Novi Sad, Faculty of Technical Scienc	Serbia
17:15h	05444	T2.2-3	Traction Drive Topology with Input Transformer and Active Rectifier Based on a Multiphase Switched Reluctance Motor	Ledovskikh Artur	Moscow Power Engineering Institute, Department of Electric Drives	Russian Federation
				Kazemirova Yulia	Moscow Power Engineering Institute, Department of Electric Drives	Russian Federation
				Pham Lam	Moscow Power Engineering Institute, Department of Electric Drives	Russian Federation
				Demidova Galina	Moscow Power Engineering Institute, Department of Electric Drives	Russian Federation
				Yuan Xibo	China University of Mining and Technology, School of Electrical Engineering	China
				Anuchin Alecksey	Moscow Power Engineering Institute, Department of Electric Drives	Russian Federation
17:30h	07344	T2.2-4	Generalized Space Vector Pulse-width Modulation for Dual Inverter Open-end Winding PMSM with Isolated DC Sources: Design and Experimental Validation	Alagić Marko	University of Novi Sad, Faculty of Technical Sciences	Serbia
				Vujkov Barbara	University of Novi Sad, Faculty of Technical Sciences	Serbia
				Sievers Markus	KAI GmbH	Austria
				Ulbing Alexander	KAI GmbH	Austria
				Warmuth Andreas	KAI GmbH	Austria
				Gecić Marko	Infineon Technologies AG	Germany
17:45h	00944	T2.2-5	Hybrid Energy Storage System with Dual-Active Bridge Converter for Electric Vehicles and Sustainable Transportation	Aleksic Andrija	University of Rome "Tor Vergata"	Italy
				Terlizzi Cristina	University of Rome "Tor Vergata"	Italy
				Bifaretti Stefano	University of Rome "Tor Vergata"	Italy

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
16:45h	SESSION -T3.3		Advanced Control Systems, Measurement, and Artificial Intelligence (AI) applications			SASA - Hall 3
		Chair:	Prof. Mirjana Damnjanović, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
		Co-chair:	Prof. Dejana Herceg, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
16:45h	06044	T3.3-1	Hysteresis and core loss in stator core			
			Herceg	Dejana	University of Novi Sad, Faculty of Technical Science	Serbia
			Milutinov	Miodrag	University of Novi Sad, Faculty of Technical Science	Serbia
			Gazivoda	Nemanja	University of Novi Sad, Faculty of Technical Science	Serbia
17:00h	06744	T3.3-2	OcamCalibDeep: A Deep Super-Resolution Framework for Robust and Accurate Fisheye Calibration			
			Kushnarev	Victor	South Ural State University	Russian Federation
			A. Grigorev	Maksim	South Ural State University	Russian Federation
			Kholodilin	Ivan	South Ural State University	Russian Federation
			Guo	Qihui	South Ural State University	Russian Federation
			Zhang	Zihan	South Ural State University	Russian Federation
			Li	Bing	North China Electric Power University	China
			Han	Zhaowei	South Ural State University	Russian Federation
17:15h	SESSION -T5.1		Power quality			SASA - Hall 3
		Chair:	Prof. Mirjana Damnjanović, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
		Co-chair:	Prof. Dejana Herceg, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
17:15h	05944	T5.1-1	Distribution network load flow simulator			
			Herceg	Dejana	University of Novi Sad, Faculty of Technical Science	Serbia
			Vidaković	Jovana	University of Novi Sad, Faculty of Sciences	Serbia
			Vojnović	Nikola	University of Novi Sad, Faculty of Technical Science	Serbia
			Herceg	Đorđe	University of Novi Sad, Faculty of Sciences	Serbia
			Vidaković	Milan	University of Novi Sad, Faculty of Technical Science	Serbia
17:30h	07144	T5.1-2	Design of Magnetic Components for EMI Protection			
			Katanić	Miroslav	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Tešović	Dragana	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Marković	Nikola	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Aleksić	Stanko	University of Belgrade, Vinča Institute of Nuclear Sciences, Laboratory of Physics and Chemistry	Serbia
			Milutinov	Miodrag	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Kisić	Milica	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Damnjanović	Mirjana	University of Novi Sad, Faculty of Technical Sciences	Serbia
17:45h	07444	T5.1-3	Impact of Blockchain Energy Trading on Power Quality			
			Katić	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Horvat	Nebojša	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Čorba	Zoltan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Stanisavljević	Aleksandar	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Gajić	Dušan	University of Novi Sad, Faculty of Technical Sciences	Serbia
18:30 - 19:00h			Opening of the Exhibition "125 Years of Power Electronics" Academician Prof. Slobodan Vukosavić, University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			SASA Gallery Djure Jakšića 2 Belgrade
19:00h			Welcome reception in the SASA Gallery, Djure Jakšića 2, Belgrade			

9 Oct. 2025.

Thursday

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
Venue: Serbian Academy of Sciences and Arts Gallery (SASA Gallery), Djure Jakšića 2, Belgrade						
09:00 - 12:00h	TT-3		Tutorial 3 (Coffee Break at 10:30h)			SASA Gallery
		Chair:	Alecksey Anuchin, Moscow Power Engineering Institute, Moscow, Russia			
09:00h		TT-3	Delta-Sigma Modulation Technology in Electric Drives			
			Anuchin	Alecksey	Moscow Power Engineering Institute	Russian Federation
			Demidova	Galina	ITMO University, Saint-Petersburg	Russian Federation
Venue: Belgrade, Chamber of Commerce and Industry of Serbia (CCIS), Resavska 13-15, Belgrade						
09:00h			BELGRADE (CCIS) Registration desk opens			
09:30h - 14:00h	Panel P1		Flexibility of the Distribution Systems		Joint event: Ee2025 - CIREd Serbia	CCIS
		Chair:	Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
		Co-chair:	Dr Aleksandar Janjić, GOPA - International Energy Consultants GmbH, Belgrade, Serbia			
09:30h			Opening Dr Zoran Simendić, CIREd Serbia president Prof. Vladimir Katic, Ee2025 Gen. Chair			CCIS
10:00h	PLENARY Session - IL1		INVITED LECTURES			CCIS
10:00h		IL1.1	Flexibility services in electric distribution systems			
			Suljanović	Nermin	Institute M. Vidmar (EIMV), Ljubljana, Slovenia/University of Tuzla, Tuzla, B&H	Slovenia/B&H
10:30h		IL1.2	Development trends of the electric distribution networks flexibility in Serbia			
			Janjić	Aleksandar	GOPA - International Energy Consultants GmbH, Belgrade	Serbia
11:00 - 11:30h			Discussion			
11:30 - 12:00h			Coffee Break			
12:00h	PLENARY Session - KN3		KEY-NOTE PAPERS			CCIS
12:00h		KN3.1	Effects of Converter Interfaced Generation in Power System Stability			
			Hatziargyriou	Nikos	National Technical University of Athens, Athens	Greece
12:30h		KN3.2	Challenges and opportunities of operation of power electronics rich power networks			
			Milanović	Jovica	University of Manchester, Manchester	United Kingdom
13:00h		KN3.3	Power Semiconductor Devices - Development Trends and Challenges in Ruggedness & Reliability -			
			Lorenz	Leo	German Academy of Science/ECPE/Infineon, Nuremberg	Germany
13:30 - 14:00h			Discussion			
14:00h			Announcement: 15 th Conference of electrical distribution networks of Serbia – CIREd 2026 SRB			
14:10h			Announcement: 2 nd Conference of electrical distribution networks of Montenegro - CIREd 2026 MNG			
14:15h - 15:00h			LUNCH BREAK			



Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
15:00 - 16:00h	IS1		Industry session: Role of Power Electronics in Modern Industry (Industrial sponsors presentations)			CCIS
		Chair:	Prof. Aleksandar Stanisavljević, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
		Co-chair:	Prof. Zoltan Čorba, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
15:00h	IS1.1		Model-Based Engineering in Teaching and Research: the Typhoon HIL Way			
			Kavgjić Aleksandar, Academic Sales Lead for EAA Region, Typhoon Hil, Inc., Novi Sad			Serbia
15:40h	IS1.2		Smart Cooling for Modern Mobility: The Story of Radiator Fan Technology			
			Aleksić Radoslav, Team Leader System Development Electronics, Brose d.o.o., Pančevo			Serbia
			Kononolov Luka, Coordinator System Engineer Electronics, Brose d.o.o., Pančevo			Serbia
16:00h	PLENARY Session - KN4		KEY-NOTE PAPERS			CCIS
		Chair:	Prof. Dražen Dujjić, École Polytechnique Fédérale de Lausanne - EPFL, Lausanne, Switzerland			
		Co-chair:	Prof. Aleksandar Stanisavljević, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
16:00h	KN4.1		Monolithic Bi-Directional Power Semiconductors – Status and Perspectives			
			Grbović	Petar. J.	University of Innsbruck, Innsbruck Power Electronics Lab. (i-PEL)	Austria
16:30h	KN4.2		Mitigating Harmonic Challenges in Distribution Networks with High Penetration of Grid-Connected Power Converters: Emission, Immunity, and Standardisation Pathways			
			Zare	Firuz	Queensland Univ. of Techn., School of Electrical Engineering and Robotics, Brisbane	Australia
17:00 - 17:15h			Coffee Break			
17:15h	SESSION -T4.2		Power Electronics in Smart Grids, and Energy Storage			CCIS
		Chair:	Prof. Dražen Dujjić, École Polytechnique Fédérale de Lausanne - EPFL, Lausanne, Switzerland			
		Co-chair:	Prof. Aleksandar Stanisavljević, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia			
17:15h	04244	T4.2-1	Performance Evaluation of Power Reversal in Double-Stage Solid-State Transformers Equipped with Resonant Conversion Stages			
			Darvishzadeh	Amin	École Polytechnique Fédérale de Lausanne - EPFL	Switzerland
			Dujic	Drazen	École Polytechnique Fédérale de Lausanne - EPFL	Switzerland
17:30h	04744	T4.2-2	Enhancing Grid Stability with Grid-Forming Inverters: Experimental Validation in Hybrid Microgrids			
			Rebrov	Vladimir	Power Conversion Lab, LLC	Russian Federation
			Mulkamanov	Erik	Power Conversion Lab, LLC	Russian Federation
			Muravyev	Dmitry	Power Conversion Lab, LLC	Russian Federation
17:45h	05544	T4.2-3	Pulse Generation Control Strategy for Smooth Supercapacitor Charging from a Fuel Cell			
			Bhakar	Priya Singh	Aalto university, dept. of Elec. Eng. and Automation	Finland
			Ijaz	Faheem	Aalto university, dept. of Elec. Eng. and Automation	Finland
			Taheri	Shamsodin	Universite de Québec en Outaouais, Computer Science and Engineering	Canada
			Pouresmael	Edris	Aalto university, dept. of Elec. Eng. and Automation	Finland
18:00h	05644	T4.2-4	Transient Stability in Grid-Forming Converters with Current Limitation and DC-Link Voltage Control			
			Oyuela-Ocampo	Juan Camilo	University of Trento	Italy
			Tedeschi	Elisabetta	University of Trento	Italy
			Cecati	Federico	University of Trento	Italy
18:15h - 18:45h			Serbia Power Electronics Society (Društvo za energetsku elektroniku Srbije)			CCIS
			Annual Meeting (Godišnja skupština) - Session in Serbian			
			Prof. Katić	Vladimir	President of the Serbian Power Electronics Society, Novi Sad	
20:00h			Typhoon Awards - Gala Diner		Restaurant "MOVE", Ušće, bb, Belgrade (https://www.movebelgrade.rs/)	

10 Oct. 2025.

Friday

Time	Paper Id	Session	Paper title / Author: Family name	Author: Given name	Affiliation	State / Venue
Venue: Hotel Novi Sad (HNS), Bulevar Jaše Tomića 1, Novi Sad						
07:30h: (Bus transfer BG – NS – BG) Place of departure/arrival: Studentski trg, Belgrade						
09:00h			NS (HNS) Registration desk opens			
09:00h - 09:30h			Welcome coffee			HNS
09:00 - 15:00h			IEEE LMAG Serbia and Montenegro Section Meeting			HNS
09:30h	PLENARY Session - IL2		INVITED LECTURES			HNS
		Chair:	Aleksandar Prodić, University of Toronto, Toronto, Canada			
		Co-chair:	Slobodan Vukosavić, University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade			
09:30h	IL2.1		Power Electronics and Drives for Space Applications – Trends and Challenges			
			Vračar	Darko	The Exploration Company GmbH, Planegg	Germany
09:50h	IL2.2		Black-box and grey-box battery modelling for State-of-Charge estimation across steady-state and transient regimes			
			Cvetičanin	Stevan	University of Novi Sad, Faculty of Technical Sciences	Serbia
10:20 - 10:30h			Coffee Break			
10:30h	PANEL - P2		Future trends in Power Electronics and EU project perspectives			HNS
		Chair:	Blaabjerg	Frede	Aalborg University	Denmark
		Panelists:	Boroyevich	Dushan	Virginia Tech, Center for Power Electronics Systems	United States
			Katić	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Lorenz	Leo	German Academy of Science/ECPE/Infineon, Nuremberg	Germany
			Prodić	Aleksandar	University of Toronto	Canada
			Vukosavić	Slobodan	University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade	Serbia
			Li	Yongdong	Tsinghua University, Beijing	China
			...(TBC)			
12:45h - 14:00h			Technical visit to Typhoon-HIL (Bus transfer)			Typhoon-HIL
14:00h - 14:45h			LUNCH BREAK			
14:45h - 15:00h			Closing of the International Symposium			Typhoon-HIL
			Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia			
15:00h			Bus transfer: Depart to Belgrade			Typhoon-HIL

XXIII Savetovanje Energetska elektronika - Ee 2025

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Utorak, 7 Okt. 2025.				
PO PROGRAMU ZA 23 rd INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS				
Sreda, 8 Okt. 2025.				
PO PROGRAMU ZA 23 rd INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS				
Četvrtak, 9 Okt. 2025.				
PO PROGRAMU ZA 23 rd INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS				
Petak, 27 Okt. 2023.				
Mesto održavanja: Hotel Novi Sad (HNS), Bulevar Jaše Tomića 1, Novi Sad				
9:00	REGISTRACIJA			
09:00h - 15:00h PO PROGRAMU ZA 23 rd INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS				
	Id rada	Tema	Naslov rada i Autori	Država / Mesto
15:00h	SESIJA - S1		ENERGETSKA ELEKTRONIKA I SRODNE OBLASTI	In Serbian (Online)
		Predsed.:	Prof. Aleksandar Stanisavljević, Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad, Srbija	
		Ko-Predsed.:	Prof. Zoltan Čorba, Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad, Srbija	
15:00h	00145	S1-1	SIMPOZIUM ENERGETSKA ELEKTRONIKA U BROJKAMA	
			Katić Vladimir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Nikolić Dragomir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Čorba Zoltan Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Gerić Ljubinka Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Galić Jadranka Društvo za energetske elektroniku, Novi Sad	Srbija
15:10h	00245	S1-2	KRATAK ISTORIJAT ENERGETSKE ELEKTRONIKE KROZ SAVETOVANJA Ee	
			Katić Vladimir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Nikolić Dragomir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Čorba Zoltan Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Stanisavljević Aleksandar Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Gerić Ljubinka Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Galić Jadranka Društvo za energetske elektroniku, Novi Sad	Srbija
15:20h	00345	S1-3	ISPUNJENJE KRITERIJUMA FLIKERA I HARMONIKA STRUJA ZA FN ELEKTRANE PREMA PRAVILIMA O RADU DISTRIBUTIVNOG SISTEMA	
			Čorba Zoltan Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Katić Vladimir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
			Nikolić Dragomir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija
15:20h	00445	S1-4	PROCENA UTICAJA NAUČNIH SKUPOVA IZ OBLASTI ENERGETSKE ELEKTRONIKE	
			Katić Vladimir Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	Srbija

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