















International Symposium on
POWER ELECTRONICS Ee 2021
Novi Sad. Serbia



October 27th - 30th, 2021

PROGRAM (Preliminary):

Virtual (Online)

27 Oct. 2021. (Wednesday):

09:00h - 09:50h Registration / Testing

09:50h-10:00h Tutorial opening

10:00h - 13:00h Tutorial 1:

TT-1: Huai Wang and Shuai Zhao, Aalborg University, Aalborg, Denmark

"AI-Assisted Condition and Health Monitoring in Power Electronics"

13:00 - 14:00h Lunch Break

14:00h - 17:00h Tutorial 2:

TT2: Miroslav Vasić, Luis Gomez Navajas, Javier Galindos Vicente, Universidad Politecnicade Madrid Center for Industrial Electronics, Madrid, Spain

"Design Challenges for high-performance GaN based converters in multi-MHz applications"

17:30h - 18:30h Testing session: Paper Video Presentations Upload and Testing

28 Oct. 2021. (Thursday):

09:00h - 09:45h Registration / Testing & Upload

09:45h - 10:00h Opening Ceremony

10:00h - 11:30h Key Notes 1:

KN-1.1: Academician, Prof. Dr. Leo Lorenz, ECPE/Infineon and the German Academy of Science, Nuremberg, Germany

"Power Semiconductor Devices - Development Trend and Application Challenges will Silicon be replaced by WB-Technologies?"

KN-1.2: Prof. Dr. Jelena Popović, University of Twente, The Netherlands

"Energy Access – challenges and opportunities for the power electronics community"

KN-1.3: Academician, Prof. Dr. Slobodan Vukosavić, University of Belgrade/Serbian Academy of Sciences and Arts, Belgrade, Serbia

"Integration of Renewable Sources in AC Grids"

11:30h - 11:45h Refreshment Break

11:45h - 13:00h Invited Lectures

IL-1.1: Prof. Dr. Thierry Meynard, Laboratoire LAPLACE, Université de Toulouse, Toulouse, France "Self-Designing Blocks: Turn your simulation software into a Pre-Design Tool"

IL-1.2: Prof. Alessandro Lidozzi, Roma Tre University, Rome, Italy

"PHIL - Power Hardware in the Loop for the real-time power emulation of electrical machines"

IL-1.3: Dr. Gerald Deboy, Infineon Technologies Austria AG, Villach, Austria

"On the True Value of Wide Bandgap Power Devices for Low and High Power Applications"

13:00h - 14:00h Lunch Break

14:00h - 16:00h Topic 1: Session T1.1 (8 papers)

14:00h - 16:00h Topic 7: Session T4.1 (8 papers)

16:00h - 16:15h Refreshment Break

16:15h - 18:15h Topic 1: Session T1.2 (6 papers)

16:15h - 18:15h Topic 4: Session T7.1 (5 papers)

18:15h Social Activities (Virtual Welcome Party)



















International Symposium on
POWER ELECTRONICS Ee 2021
Novi Sad, Serbia



October 27th - 30th, 2021

29 Oct. 2021. (Friday / Petak): (Online)

08:00h - 09:00h Registration / Testing & Upload

09:00h - 10:30h Topic 2: Session T2.1 (6 papers)

09:00h - 10:30h Topic 6: Session T6.1 (5 papers)

10:30h - 10:45h Refreshment Break

10:45h - 11:45h Key Notes 2

KN-2.1: Dr. Branislav Kisačanin, Nvidia Corp., Santa Clara, USA/Centre for AI, Novi Sad, Serbia

""Transformers" for Artificial Intelligence"

KN-2.2: Prof. Dr. Huai Wang, Aalborg University, Aalborg, Denmark

"AI Applications for Power Electronics - Challenges and Opportunities"

11:45h - 12:00h Invited Papers

IP-1.1: Assoc. Prof. Dr. Dušan Gajić, University of Novi Sad, Novi Sad, Serbia

"Blockchain-based Smart Decentralized Energy Trading for Renewable Energy Systems"

IP-1.2: Caio R. D. Osório, Typhoon HIL Inc., Novi Sad, Serbia

"Advancements on Real-Time Simulation for High Switching Frequency Power Electronics Applications"

IP-1.3: Henrique Horst Figueira, Typhoon HIL Inc., Novi Sad, Serbia

"HIL-Based Certification for Converter Controllers: Advantages, Challenges and Outlooks"

13:00h - 14:00h Lunch Break

14:00h - 15:45h Special Session - Industry Session

15:45h - 16:00h Refreshment Break

16:00h - 18:00h Topic 7: Session T1.3 (8 papers)

16:00h – 18:00h Topic 3: Session T3.1 (5 papers)/ Topic 4: Session T4.2 (2 papers)

18:00h - 18:30h Awards Session (Media sponsor - Journal Energies)

- Best Paper Award (300\$, sponsored by *Energies*)
- Best Student Paper Awards (free registration fee at Ee2022, sponsored by Ee conference)
- National Best Paper Award for Serbian authors only (sponsored by Power Electronics Society of Serbia)
- Special Issue of Energies: "Smart Power Electronics –
 Selected papers from the 21st International Symposium
 on Power Electronics (Ee 2021)": Announcement of the
 selected papers.



18:30h Social Activities (Virtual Party)

30 Oct. 2021. (Saturday / Subota): (Online)

08:00h - 09:00h Registration / Testing & Upload

09:00h – 10:00h XXI Savetovanje Energetska elektronika (In Serbian) (5 radova)

10:00h - 11:00h Key Notes 3

KN-3.1: Asst.Prof. Dr. Minjie Chen, Princeton University, Princeton, USA

"Managing Power Complexity for Extreme Performance: Circuit, Architecture, and Magnetics"

KN-3.2: Kevin Hermanns, PE-Systems GmbH, Darmstadt, Germany

"Component Data - The Key to Unleash the Potential of Design Automation for Power Electronics"

11:00h - 11:15h Refreshment Break

11:15h - 12:30h Topic 1: Session T1.4 (5 papers)

12:30h Godišnja skupština Društva za energetsku elektroniku Srbije