University of Novi Sad
Faculty of Technical Sciences

First Announcement & Call for Papers

Ee 2023

50 years 1973-2023

22nd International Symposium on **POWER ELECTRONICS Ee 2023**

Venue:
Science & Technology Park Novi Sad and Serbian Academy of Sciences and Arts, Belgrade

Novi Sad & Belgrade, Serbia
October 25th - 28th, 2023

NOVI SAD/BELGRADE SERBIA

Continuing the tradition of 50 years,
the **Power Electronics Society of Serbia, Novi Sad,**
Serbian Academy of Sciences and Arts,
Belgrade, Institute "Nikola Tesla", Belgrade, and Faculty of Technical Sciences of the University of Novi Sad
are organizing:

22nd International Symposium POWER ELECTRONICS - Ee2023

We are inviting you to participate in the symposium and contribute to the development of power electronics. The purpose of the symposium is to provide a forum for presentation and discussion the state-of-art research results in the field of power electronics and related areas.

CONFERENCE CHAIRS:

Prof. Vladimir Katic, Conference Chair
University of Novi Sad, Novi Sad, Serbia

Acad. Prof. Slobodan Vukosavić, Conference Co-Chair
University of Belgrade SASA, Belgrade, Serbia

Prof. Dushan Boroyevich, Conference Co-Chair
Virginia Tech, Blacksburg, USA

Prof. Miroslav Vasic, Technical Co-Chair
Universidad Politecnica de Madrid, Madrid, Spain

Prof. Jelena Popović, Technical Co-Chair
The University of Twente, Twente, The Netherlands

Prof. Aleksandar Prodic, Technical Co-Chair
University of Toronto, Toronto, ON, Canada

Dr. Dusan Graovac, Technical Co-Chair
Infineon Technologies AG, Neubiberg, Germany

Dr. Žarko Janda, Technical Co-Chair
Institute Nikola Tesla, Belgrade, Serbia

Assoc. Prof. Zoltan Corba, Publication Chair
University of Novi Sad, Novi Sad, Serbia

Assist.Prof. Aleksandar Stanisavljevic, Tresurer
University of Novi Sad, Novi Sad, Serbia

ORGANIZING COMMITTEE

Assoc. Prof. Zoltan Corba, University of Novi Sad, Serbia, Chair
Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia
Academ, Prof. Slobodan Vukosavić, University of Belgrade and Serbian Academy of Sciences and Arts, Belgrade, Serbia
Dr. Žarko Janda, Institute Nikola Tesla, Belgrade, Serbia
Nebojša Drakulić, Science Technology Park, Novi Sad, Serbia
Prof. Borislav Jeftenić, Power Electronics Society, Serbia
Prof. Nebojša Mitrović, University of Niš, Serbia,
Prof. Predrag Pejović, University of Belgrade, Serbia
Prof. Darko Marčetić, University of Novi Sad, Serbia
Prof. Dragan Simić, University of Novi Sad, Novi Sad, Serbia
Assoc. Prof. Boris Dumnić, University of Novi Sad, Serbia
Assist. Prof. Aleksandar Stanisavljević, University of Novi Sad, Serbia
Assist. Prof. Dejan Jerkan, University of Novi Sad, Serbia
Milica Banović, Ph.D. student, University of Belgrade, Serbia
Kristina Vujkov, Ph.D. student, University of Novi Sad, Serbia
Barbara Vujkov, University of Novi Sad, Serbia
Mladen Vučković, University of Novi Sad, Serbia
Dragomir Nikolić, University of Novi Sad, Serbia
Ljubinka Buba Gerić, University of Novi Sad, Serbia

INTERNATIONAL PROGRAMME COMMITTEE

(provisional list)

1. Prof. Kouzou Abdellah, University of Djelfa, Algeria
2. Prof. Goce L. Arsov, SS Cyril and Methodius University, Skopje, North Macedonia
3. Prof. Vanja Ambrozic, University of Ljubljana, Slovenia
4. Prof. Prof. Seddik Bacha, Grenoble Alpes University/G2Elab and Supergrid Institute, France
5. Prof. Drago Ban, University of Zagreb, Zagreb, Croatia
6. Prof. Pavol Bauer, TU Delft, Delft, Nederland
7. Prof. Milan Bebić, University of Belgrade, Belgrade, Serbia
8. Prof. dr Frede Blaabjerg, Aalborg University, Aalborg, Denmark
9. Prof. Branko Blanuša, University of Banja Luka, Banja Luka, B&H
10. Prof. Ion Boldea, University Politechnica of Timisoara, Romania
11. Prof. dr Dushan Boroyevich, Virginia Tech, Blacksburg, USA
12. Prof. Sergio Busquets-Monge, Univer. Politecnica de Catalunya, Spain
13. Prof. dr Mihai Cernat, "Transilvania" Univ. of Brasov, Brasov, Romania
14. Prof. Ilhami Colak, Nisantasi University, Istanbul, Turkey
15. Prof. Sergio Cruz, University of Coimbra, Portugal
16. Prof. Sasa Djokic, The University of Edinburgh, UK
17. Prof. em. Branko Dokić, University of Banja Luka, Banja Luka, B&H
18. Prof. Martin Doppelbauer, Karlsruhe Institute of Technology, Karlsruhe, Germany
19. Assoc.Prof. Dinu Dragan, University of Novi Sad, Novi Sad, Serbia
20. Dr Jasna Dragosavac, Institute "Nikola Tesla", Belgrade, Serbia
21. Prof. Drazen Dujic, EPFL, Lausanne, Switzerland
22. Prof. Viliam Fedak, TU Košice, Košice, Slovakia
23. Assoc.Prof. Dušan Gajić, University of Novi Sad, Novi Sad, Serbia
24. Prof. Ilya Galkin, Riga Technical University, Riga, Latvia
25. Dr. Dusan Graovac, Infinion, Neubiberg, Germany
26. Assoc. Prof. Stevan Grabić, University of Novi Sad, Novi Sad, Serbia
27. Prof. Adrian Graur, "Stefan cel Mare" University of Suceava, Suceava, Romania
28. Prof. Petar Grbovic, University of Innsbruck, Innsbruck, Austria
29. Prof. Boguslaw Grzesik, Silesian Univ. of Technology, Gliwice, Poland
30. Prof. Marc Hiller, University in Karlsruhe, Karlsruhe, Germany
31. Dr. Žarko Janda, Institute "Nikola Tesla", Belgrade, Serbia
32. Prof. Borislav Jeftenić, Power Electronics Society, Novi Sad, Serbia
33. Assoc. Prof. Dejan Jerkan, University of Novi Sad, Novi Sad, Serbia
34. Prof. Gojko Joksimović, Univ. of Montenegro, Podgorica, Montenegro
35. Prof. Milutin Jovanović, Northumbria University, Newcastle, UK
36. Prof. Vladimir Katić, University of Novi Sad, Novi Sad, Serbia
37. Dr. Jovan Knežević, BMW Group, Germany
38. Prof. Johann W. Kolar, SFIT, ETH Zentrum, Zurich, Switzerland
39. Prof. Emil Levi, Liverpool John Moores University, Liverpool, UK
40. Prof. Leo Lorenz, Infinion, ECPE, Nurenberg, Germany
41. Prof. Slobodan Lubura, University of East Sarajevo, East Sarajevo, B&H
42. Prof. Darko Marčetić, University of Novi Sad, Novi Sad, Serbia
43. Prof. Petar Matić, University of Banja Luka, Banja Luka, B&H
44. Prof. L. Martinez-Salamero, Rovira i Virgili University, Tarragona, Spain
45. Prof. Jovica Milanović, The University of Manchester, UK
46. Prof. Miro Milanovič, University of Maribor, Maribor, Slovenia
47. Prof. Čedomir Milosavljević, University of East Sarajevo, BIH
48. Prof. Slobodan Mircevski, SS Cyril and Methodius University, Skopje, North Macedonia
49. Prof. Nebojša Mitrović, University of Niš, Niš, Serbia
50. Prof. Valentin Oleschuk, Academy of Sciences of Moldova, Moldova
51. Prof. Denis Pelin, University of Osijek, Osijek, Croatia
52. Prof. Predrag Pejović, University of Belgrade, Belgrade, Serbia
53. Prof. Milutin Petronijević, University of Niš, Niš, Serbia
54. Prof. Juan Peracaula, Polytechn. Univ. of Catalonia, Barcelona, Spain
55. Prof. Aleksandar Prodić, University of Toronto, Toronto, Canada
56. M.Sc. Jovan Radaković, EPS, Subotica, Serbia
57. Prof. Leposava Ristić, University of Belgrade, Belgrade, Serbia
58. Prof. Marco Rivera, Universidad de Talca, Talca, Chile
59. Prof. Milan Radmanović, University of Niš, Niš, Serbia
60. Prof. Miran Rodič, University of Maribor, Maribor, Slovenia
61. Prof. Pedro Rodriguez-Ayerbe, University Paris-Saclay, Gif-sur-Yvette, France
62. Prof. Alfred Rufer, EPFL, Lausanne, Switzerland
63. Prof. Mincho Simeonov, Technical Univ. of Gabrovo, Gabrovo, Bulgaria
64. Assis. Prof. Dr. Aleksandar Stanisavljević, Univ. of Novi Sad, Serbia
65. Prof. Aleksandar M. Stanković, Tufts University, Boston, USA
66. Dr. Vojislav Stefanović, V-S Drives, New York, USA
67. Prof. Mariusz Stepien, Silesian Univ. of Technology, Gliwice, Poland
68. Dr. Đorđe Stojić, Institute "Nikola Tesla", Belgrade, Serbia
69. Prof. Milomir Šoja, University of East Sarajevo, East Sarajevo, B&H
70. Prof. Alberto Tessarolo, University of Trieste, Trieste, Italy
71. Prof. Miroslav Vasić, Universidad Politecnica de Mardid, Madrid, Spain
72. Dr. Vladimir Vukić, Institute Nikola Tesla, Belgrade, Serbia
73. Academ. Prof. dr Slobodan Vukosavić, University of Belgrade and Serbian Academy of Sciences and Arts, Belgrade, Serbia
74. Prof. Yongheng Yang , Aalborg University, Aalborg, Denmark

TOPICS

1. Power converters and devices

- New technologies and future trends,
- Wide-band devices (GaN, SiC, etc.) and drivers,
- Development, realization, and application of rectifiers, inverters, choppers, and other converters,
- Converters for DC and AC power supplies (DC/DC, UPS...), chargers for Accu-batteries, maintenance, etc.,
- Multilevel converters, and MMC,
- Analysis, modeling, and simulation of converters,
- Converters in development.

2. Automotive and Industrial Electrical drives

- Electrical vehicles (EV) drives and e-traction,
- Battery chargers, G2V, V2G, and V2V systems,
- Batteries for EVs, and battery management system.
- Industrial electrical drives, multi-motor drives,
- Analysis, modeling, and simulation of drives.

3. Electrical Machines

- Electronic transformers, and SST,
- Analysis, modeling, and simulation,
- Construction, protection, supervision, and diagnostics,
- Testing, exploitation, and repair.

4. Advanced Control Systems and Measurement

- Digital control of power electronics converters and systems,
- Electronic measurement systems,
- Control of industrial processes,
- Computer application (CAD, CAM...),
- Communication systems, supervision, and diagnostics,
- Modeling, simulation, estimation, and identification.

5. Smart Power Electronics, Smart Grids, and Energy Storage

- Artificial intelligence in power electronics,
- Deep learning applications,
- Application of power electronics in Smart Grids and Low-inertia grids, Microgrids, and "Energy islands"
- Energy storage systems
- Condition monitoring and predictive maintenance,
- Power electronics control structures in microgrids,
- Self-aware and self-adaptable power electronics systems,
- Power Electronics for the Smart Grids and Industry 4.0,
- Role of power electronics in microgrids, hybrid grids, and distributed energy sources.

6. Power quality

- Power electronic converters and power quality,
- Electromagnetic compatibility, EMI, ecology,
- Active filters, FACTS, DVRs, STATCOMs, and UPQCS,
- Power quality characterizations and classification systems.

7. Renewable & distributed energy sources

- Power electronics application in renewables (RES) and hybrid systems,
- Power electronics devices in wind and solar plants,
- Interaction of power electronics and grids,
- "Clean" energy sources, and multi-energy transformations.

Venue

The 22nd International Symposium on Power Electronics is organized by the Power Electronics Society of Serbia, Novi Sad, Serbian Academy of Sciences and Arts, Belgrade, Institute "Nikola Tesla", Belgrade, and the Faculty of Technical Sciences of the University of Novi Sad. It will be held

at the Science and Technology Park, Novi Sad, Serbia, and
at the Serbian Academy of Sciences and Arts, Belgrade, Serbia

Submission of papers

Prospective authors are invited to submit full papers according to the IEEE Paper Guidelines (template). The papers should not have been previously published and should present theoretical, computer simulations, or experimental research results as well as results of the application of developed methods in engineering practice, engineering solutions, experience in exploitation, etc. Each paper should be prepared. All papers will be blind-reviewed by three independent reviewers. Accepted papers will be available through IEEE Xplore, provided that they have been presented at the conference and passed the plagiarism checker (IEEE Cross Check/Ithenticate). Citation databases: Web of Science & Scopus.

All papers should be submitted using the ON-LINE conference system.

IEEE Xplore Digital Library | Web of Science | Scopus

Best paper awards

The outstanding papers will be considered for the best paper award, best Serbian author awards (three awards), and best student paper awards (three awards).

Deadlines

Submission of full paper :	**April 29, 2023**
Notification of acceptance:	**July 15, 2023**
Receipt of full paper:	**September 1, 2023**

www.dee.uns.ac.rs

Ee 2023- Secretariat
Faculty of Technical Sciences Trg Dositeja Obradovića 6,
21000 Novi Sad, SERBIA
E-mail: dee@uns.ac.rs
Phone: +381 21 485 4504
485 4529

Supported by*:

ZF | Typhoon HIL | brose Excellence in Mechatronics | Continental The Future in Motion

Technically Co-sponsored by*:

IEEE Serbia and Montenegro Section — IEEE – Serbia and Montenegro Section, BELGRADE
IEEE –Joint Chapter IAS/IES/PELS, NOVI SAD

pels IEEE Power Electronics Society — IEEE Power Electronics Society

IEEE Industrial Electronics Society — IEEE Industrial Electronics Society

IAS IEEE Industry Applications Society — IEEE Industry Applications Society

EPE Association

ECPE European Center for Power Electronics

ETRAN — Society for Electronics, Telecommunications, Computers, Automatic Control and Nuclear Engineering

*To be confirmed

Organized by:

POWER ELECTRONICS SOCIETY
Trg Dositeja Obradovića 6, 21000 NOVI SAD, SERBIA
Tel. ++381-21-450-032 Fax. +381-21-4750-572
E-mail: dee@uns.ac.rs

UNIVERSITY OF NOVI SAD
FACULTY OF TECHNICAL SCIENCES
Trg Dositeja Obradovića 6, 21000 NOVI SAD. SERBIA
Tel. +381-21-450-810, Fax. +381-21-458-133

INSTITUTE "NIKOLA TESLA"
Koste Glavinica 8a, 11000 BELGRADE, SERBIA
Tel. +381-11-3691-447, +381-11-3690-548
Fax. +381-11-3690-823

Serbian Academy of Sciences and Arts, Belgrade

Partner:

Science & Technology Park
Novi Sad

Under auspices of:
Ministry of Education, Science and Technological Development, Republic of Serbia, Belgrade
Provincial Secretary for Higher Education and Scientific Research Activity, AP Vojvodina, Novi Sad