

AETA 2024

The 9th International Conference on Advanced Engineering – Theory and Applications 2024

07 - 08 November 2024
Brno University of Technology, Czech Republic
Web page: aeta2024.tdtu.edu.vn

The 9th International Conference on **Advanced Engineering – Theory and Applications** will be held during 07 - 08 November 2024 in Brno, Czech Republic. The conference is co-organized by Brno University of Technology, Ton Duc Thang University, VŠB-Technical University of Ostrava and Pukyong National University for the purpose of offering a special opportunity for the scientists, researchers, engineers from universities, institutions, manufactures meet together to exchange experiences, disseminate scientific achievements and advanced technologies of Electrical, Electronic-Telecommunication, Computer Science and Mechanical-Mechatronics engineering.

All full papers will be printed in Lecture Notes in Electrical Engineering series (Springer), now indexed by EI-Compendex, SCOPUS, MetaPress, Springerlink.

Authors are invited to submit full papers or abstracts describing original research work in areas including, but not limited to,

Communications: Mobile Communications, Wireless networks, Ad hoc & sensor networks, Information theory, Optical networking, Satellite communications, Cognitive networks, Antennas and propagation, Network protocols and architectures, IoT networks.

Signal processing: Image processing, Computer vision, Data processing, Fractal geometry in image processing.

Control and systems: Adaptive control, Robust control, Nonlinear systems and control, Process control, Intelligent control.

Electrical machines & drives: Motion control, Electrical machines, Speed drives.

Energy saving: Energy management and control systems, Networks, System lighting, Automation in energy systems, Energy management systems.

Renewable energies: Solar energy, Wind energy, Hydrogen and fuel cell

Power electronics: Power quality control, FACTS, PFC, Switching circuits and power converters, Smart grid, Energy storage and compensation, Modeling and control, Switching converters.

Computational intelligence in electronic and design: Artificial neural network, Fuzzy system, Evolutionary computing, Genetic programming, Grammatical evolution.

Cyber Security: Classical methods and artificial intelligence in security, Deterministic chaos and electronic devices in encryption and security, Threat identification by artificial intelligence and its hybridization with classical methods, Blockchain based applications, AI for Cybersecurity, Quantum Computing for Cyber, Smart Grid security, Cyber resilience, and Cyber economy.

Nontrivial Dynamics of Electronic devices: Nontrivial and chaotic behavior in electronic and energy devices, Blackout in wide energy systems - modeling, Identification and impact on real energy devices and systems.

Mechatronics: Robotic, Industrial automation, Micro electromechanical systems, Sensor and actuators.

Computational Mechanics: Numerical methods (FEM, BEM, IGA, ...), Structural optimization; Structural dynamics; Structural Reliability; Fracture and damage mechanics; Material Mechanics; Modeling and Simulation; Structural health monitoring.

Materials Science: Advanced research on semiconductor devices, nanotechnology, etc.

Important Dates

- * Submission of Papers/Abstracts by Authors: **30 September 2024**
- * Notification of Acceptance: **15 October 2024**
- * Submission of Paper Source Files & Copyright Form: **22 October 2024**
- * Author Registration (Compulsory for Paper Acceptance): **22 October 2024**
- * Conference: **07-08 November 2024**

Keynote Speakers: TBA

Contact

AETA 2024 Secretariat - Email: aeta2024@tdtu.edu.vn

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