



AETA 2019

**The 6th International Conference on
Advanced Engineering – Theory and Applications 2019**

6 - 8 November 2019

Corporacion Unificada Nacional (CUN), Bogotá, Colombia

<http://aeta2019.org/>



The International Conference on **Advanced Engineering – Theory and Applications** will be held during 6 - 8 November 2019 in Colombia. The conference is organized by Corporacion Unificada Nacional (CUN), co-organized by 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 papers will be published in Lecture Notes in Electrical Engineering series (Springer), now indexed by ISI Proceedings, EI-Compendex, SCOPUS, MetaPress, Springerlink.

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

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

Electrical machines and drive systems: 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.

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

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

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.

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.

Important Dates

- * Submission of Papers by Authors: **15 June 2019**
- * Notification of Acceptance: **15 July 2019**
- * Submission of Paper Source Files & Copyright Form: **31 July 2019**
- * Author Registration (Compulsory for Paper Acceptance): **31 July 2019**
- * Conference: **6-8 November 2019**

Honorary Chairs

- Le Vinh Danh*, Ton Duc Thang Univ., Vietnam
- Václav Snášel*, Technical Univ. of Ostrava, Czech Republic
- Katsuhisa Furuta*, Tokyo Denkei Univ. and Sodick Co. Ltd., Japan
- Rodrigo Acosta*, CUN, Colombia
- Tomás Durán*, CUN, Colombia
- Santiago Rodríguez*, CUN, Colombia

General Co-Chairs

- Ivan Zelinka*, Technical Univ. of Ostrava, Czech Republic
- Dario Fernando Cortés*, CUN, Colombia
- Sang Bong Kim*, Pukyong National Univ., Korea
- Tran Trong Dao*, Ton Duc Thang Univ., Vietnam

Technical Program Co-Chairs

- Vo Hoang Duy*, Ton Duc Thang Univ., Vietnam
- Yesid Díaz Gutierrez*, CUN, Colombia

Organizing Co-Chairs

- Yeyson Becerra Mora*, CUN, Colombia
- Tran Thanh Phuong*, Ton Duc Thang Univ., Vietnam

Publication Chairs

- Luis Eduardo Pallares*, CUN, Colombia
- Dante Sterpin*, CUN, Colombia
- Pandian Vasant*, Univ. Teknologi Petronas, Malaysia

Secretary

- Andres Gomez-Casseres*, CUN, Colombia

International Conference Committees

- Andres Gomez-Casseres*, CUN, Colombia
- Chan Jung Kim*, Pukyong National Univ., Korea
- Chi-Chang Wu*, Feng Chia University, Taiwan
- Ching-Hwa Cheng*, Feng Chia University, Taiwan
- Dae Hwan Kim*, Pukyong National Univ., Korea
- Dante Sterpin*, CUN, Colombia
- Dario Fernando Cortés*, CUN, Colombia
- Dang Ngoc Minh Duc*, Ton Duc Thang Univ., Vietnam
- Dinh Hoang Bach*, Ton Duc Thang Univ., Vietnam
- Dong Si Thien Chau*, Ton Duc Thang Univ., Vietnam
- Helmer Muñoz Hernández*, CUN, Colombia
- Hendrik Richter*, Leipzig Univ. of Applied Sciences, Germany
- Jouni Lampinen*, Univ. of Vaasa, Finland
- Juan Carlos Burguillo*, Univ. of Vigo, Spain
- Jun Ishikawa*, Tokyo Denki Univ., Japan
- Kevin Huy Le*, LURACO Technologies, USA
- Mario Arbulu*, CUN, Colombia
- Masaki Yamakita*, Tokyo Institute of Technology, Japan
- Masami Iwase*, Tokyo Denki University, Japan
- Mitsuji Sampei*, Tokyo Institute of Technology, Japan
- Nguyen Tan Tien*, HCMC Univ. of Technology, Vietnam
- Le The Vinh*, Ton Duc Thang Univ., Vietnam
- Pei Liu*, Feng Chia University, Taiwan
- Phan Dao*, Technical Univ. of Ostrava, Czech Republic
- Roman Senkerik*, Tomas Bata Univ. in Zlin, Czech Republic
- Shoshiro Hatakeyama*, Tokyo Denki Univ., Japan
- Tang-Chieh Liu*, Feng Chia University, Taiwan
- Vit Novotný*, Brno University of Technology, Czech Republic
- Voznak Miroslav*, Technical Univ. of Ostrava, Czech Republic
- Wilson David Florez*, CUN, Colombia
- Yesid Díaz Gutierrez*, CUN, Colombia
- Yeyson Becerra Mora*, CUN, Colombia
- Young Bok Kim*, Pukyong National Univ., Korea
- Yuri Vanessa Nieto*, CUN, Colombia

Contact

AETA 2019 Secretariat
Email: aeta2019@cun.edu.co