CALL FOR PAPERS

Special Session:

Advanced Signal Processing Techniques for Condition Monitoring of Electric Machines and Systems

Area:

Computing

Organized and Co-chaired by:

Dr. Martin Valtierra-Rodriguez §, Dr. Juan P. Amezquita-Sanchez §, and Dr. David Granados-Lieberman ¥

§ Facultad de Ingeniería, Universidad Autónoma de Querétaro, Campus San Juan del Río

Dear Colleagues,

It is our pleasure to invite you to participate in the joined conferences 2024 IEEE PES Generation, Transmission & Distribution Latin America (GTD-LA24) and the 2024 IEEE Autumn Meeting on Power, Electronics and Computing (ROPEC24) by submitting novel and original research papers on any topic related to this special session. In general, condition monitoring consists of detecting changes in the operating conditions of the machines or systems and their components from different physical variables, such as: currents, voltages, vibrations, temperatures, and acoustic emissions, among others. In order to improve the capabilities of condition monitoring systems, the application and development of new methods based on modern and advanced signal processing techniques in this topic are paramount.

The topics of interest include but are not limited to the following, always in the context of condition monitoring and fault detection of electric machines and systems:

| Time-domain and frequency-domain methods. |
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| Time-frequency decomposition tools. |
| Adaptive and modeling techniques. |
| Statistical methods. |
| Parametric and non-parametric methods. |
| Machine and deep learning algorithms. |

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□ Software and/or hardware implementations for online and real time monitoring.

All accepted and presented papers at the conference will be indexed by IEEExplore.

General information regarding manuscript submission, important dates, conference fees, and local accommodation, can be found in the conference website: http://gtdla-ropec24.ieeesco.org

Sincerely yours, Organizer committee

Martin Valtierra-Rodriguez received the Ph.D. degree in mechatronics from the Autonomous University of Queretaro, Queretaro, Mexico, in 2014. He is currently a full-time Professor-Researcher at the Faculty of Engineering, Autonomous University of Queretaro, Campus San Juan del Rio, Queretaro, Mexico.

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