



2024 Third International Conference on Sustainable Mobility Applications, Renewables and Technology (SMART)

November 22-24, 2024

Call for Contributions to the Special Session on New trends in Electric Machines Design and Optimization

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Thematic: Starting from the beginning of the 1980's, a new area of AC electric machine technology has been evolved, based on the principle that the best machine design is that there exhibits the optimum match between the machine and the associated power electronic converter, yielding the so-called "converter fed machines" (CFM). Much attention is presently focused on the design and optimization of new converter fed machines where many conventional considerations are rethought, such as the number of phases, the winding configuration, the magnetic circuit material and geometry, radial, axial or circumferential flux paths, the type of excitation, etc.

Within this trend, the present special session will be an opportunity for specialists coming from academia and industry to share their experiences and innovations aimed at the latest advances in the design and optimization of new CFM topologies. A special attention will be paid to candidates suitable for sustainable applications such as EVs, HEVs, renewable energy conversion, more electric aircrafts, aerospace actuators, medical robots, and so on. Topics of interest include, but are not limited to, the following:

- Permanent magnet (PM) machines,
- Switched reluctance machines,
- Flux switching machines,
- Hybrid-excited machines,
- Axial flux machines,
- Transverse flux machines,
- Flat linear PM machines,
- Tubular linear PM machines,
- Induction machines.

Submission: Prospective authors are invited to submit their extended abstracts of two to three A4 pages, without any specific template, directly to the special session organizers by email: amal.souissi@enis.tn imen.abdennadher@enis.tn

Deadlines:	May 15, 2024	Abstract submission
	June 15, 2024	Provisional Acceptance
	July 30, 2024	Full paper submission
	August 30, 2024	Final acceptance