

CALL FOR PAPERS

Transportation plays a fundamental role in the energy and environmental sectors all over the world. The attention paid to these issues has increased over the last decade, due to climate change and the consequent countermeasures adopted by the international community. In addition, new technologies such as batteries, semiconductors, and smart controllers are continuously improving to increase the energetic and power performances in the various areas of transportation. For these reasons, there is a lot of research in the transportation sector into improving its efficiency. Within this task, two major changes are underway. The first is the electrification of the various transportation segments, such as road and railway systems for public and private transports, naval applications, and the air transport sector. The second is the integration of advanced smart systems for intelligent and efficient management of both vehicles and their power supply infrastructures. In this framework, the main challenge deals with the integration of innovative electrical, automation, and control technologies in existing transportation systems, in order to achieve the energetic, environmental, and economic benefits provided by them.

The latest advancements in these technologies allow for the implementation of new operation and planning techniques. These have to be tested and simulated through suitable models and software, before their application in the real systems. This special issue aims to collect papers dealing with analyses, models, simulations, and experimental studies on the electrification of transport and on the optimization of operation and planning of transport systems, including the application of advanced smart systems for achieving energy efficiency. We welcome original research and review articles on both theoretical studies based on simulation models and tools for the analysis, design, optimization of operation, and planning of transport networks as well as real applications to existing systems.

Potential topics include but are not limited to the following:

- ▶ Analyses, design tools, methods, and guidelines for electrical transportation
- ▶ Modeling and simulations for electrical transportation
- ▶ Design and simulations on automation and control systems for electrical transportation
- ▶ Energetic and environmental analyses for electrical transportation
- ▶ Optimization of operations and planning of multi-modal transport networks, transit and traffic systems, transport technology, and traffic safety
- ▶ Models, design tools, simulations, and experimental studies on advanced power systems for Electric, Hybrid Electric, and Plug-In Hybrid Electric Vehicles
- ▶ Models, design tools, simulations, and experimental studies on advanced power systems for railways and urban mass transport
- ▶ Models, design tools, simulations, and experimental studies on advanced power systems for sea, undersea, air, and space vehicles

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jat/easse/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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