



CALL FOR PAPERS - SPECIAL SESSION
“Towards Smart and Electric Mobility”
for CODIT 2023
July 03-06, 2023 ▪ Rome, Italy

Session Co-Chairs:

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Session description:

This special session deals with the problem of accelerating the diffusion of smart and green means of transport towards the complete substitution of conventional internal combustion engine (ICE) vehicles. In recent years, electric mobility is spreading across the world to respond to the needs of progressively reducing the use of such vehicles that have been identified as the main cause of pollution especially in urban context.

Despite that, a more rapid diffusion of electric vehicles (EVs) is expected and desired today. The main obstacles to the rapid diffusion of such EVs are economic costs and technological limitations. The technological limitations are mainly related to the range autonomy and the recharging time given by the current EV batteries technology. As regards the range autonomy important results have been obtained so far to improve it and, in some cases, the most expensive EVs can show a driving autonomy very similar to ICE vehicles. Despite the advancements done in recent years, recharging time is still much longer than refuelling time of ICE vehicles, making the trip with an EV more time consuming. In addition, the driving experience of the users still suffers for range anxiety due to the unbalanced distribution of the chargers across the countries and to the limited information and tools available.

The goal of this special session is to propose innovative solutions and tools supporting the technological advancements, facilitating the management of the charging infrastructure and demand and improving the driving and charging experience of end users. New models, approaches and algorithms must be designed and developed towards the special issue goal including Digital Twin, AI, optimization and control techniques, centralized and distributed methods.

The topics of interest include, but are not limited to:

- Smart charging strategies
- Charge demand management
- Optimization and control of charging operations
- Digital Twin application for EVs
- Distributed charging control
- EV fleet management
- EV routing optimization

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 27, 2023**: <http://controls.paperecept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2023** link “Submit a Contribution to CoDIT 2023” and follow the steps.

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

January 27, 2023: deadline for paper submission

April 15, 2023: notification of acceptance/reject

May 20, 2023: deadline for final paper and registration