Special Issue

Electrochemical and Thermal Modeling of Batteries for Electric Vehicle

Message from the Guest Editors

We invite scientists and engineers to submit articles related to the topics in one or more of the following areas:

- Modeling of the electrochemical and thermal process for distinct types of batteries, such as Lithium-Ion batteries, solid-state batteries, and second-life batteries;
- Optimization of the parameters of batteries (i.e., choice of materials, dimensions, and cell arrangements) for specific EV applications such as heavy-duty pickup trucks;
- Modeling of the battery degradation to optimize the charging and discharging strategies;
- Design of the cooling strategies of EV batteries through thermal-fluid modeling;
- Incorporate the electrochemical and thermal models of batteries into the system modeling of electric vehicles.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)

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About the Journal

Message from the Editor-in-Chief

The *World Electric Vehicle Journal* is the official journal of the World Electric Vehicle Association (WEVA) and its members the European Association for Electromobility (AVERE), the Electric Drive Transportation Association (EDTA), and the Electric Vehicle Association of Asia Pacific (EVAAP). Since its foundation in 2007, the journal has aimed to provide a publishing platform for the academic and industrial world to share the latest developments and knowledge about electric vehicles. If you are developing Electric, Plug-in Hybrid, Hybrid Electric, or Fuel Cell Vehicles, we cordially invite you to consider us as the place for you to publish your latest results and innovations.

Editor-in-Chief

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