

## Special Issue

# Advances in Electrification and Thermal Management of Propulsion Systems

### Message from the Guest Editors

The pursuit of energy conservation has led to the rapid development of hybrid and electric vehicles. In recent years, considerable research efforts have been implemented in the design and optimization of the electric propulsion system, and the market has witnessed a significant expansion in the sales of electric vehicles. Presently, thermal management remains a serious challenge that affects the compactness, efficiency, and lifetime of an electric propulsion system, including battery heat dissipation, insulation material development, and power electronics and electric motor cooling. Hence, efforts must be spent on efficiently controlling the internal temperature while miniaturizing the propulsion system. This Special Issue focuses on the advances in the electrification and thermal management of propulsion systems and seeks contributions on how to achieve a compact and thermally efficient electric propulsion design. The topics of this Special Issue include, but are not limited to, the following:

- Battery pack cooling and miniaturization;
- Power electronics and motor cooling;
- Thermal design optimization;
- Measurement technique development.

### Guest Editors

Dr. Zhe Liu

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### Deadline for manuscript submissions

closed (30 April 2024)



## World Electric Vehicle Journal

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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.

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### Editor-in-Chief

Prof. Dr. Joeri Van Mierlo

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