# **Special Issue**

# Solutions to the Challenge of Implementing Air Conditioning Systems in Electric Vehicles

# Message from the Guest Editor

To achieve "carbon peak and carbon neutrality", various countries and regions have introduced policies and regulations to promote the development of electric vehicles, and the direction towards global long-term zero carbon emissions has been determined. As a necessary component of electric vehicles, air conditioning systems will certainly have large-scale market demand under the support of relevant policies in various countries. An air conditioning system provides cooling, heating and ventilation in the cabin of a vehicle, which is necessary to control the interior thermal environment and ensure visibility. However, air conditioning systems are electrically powered, so in an electric vehicle, the range is reduced when the air conditioning system is operating. Thus, electric vehicles present a particular challenge to the development of more efficient air conditioning systems. This Special Issue invites original research or review papers that address solutions to implementing air conditioning systems in electric vehicles.

# **Guest Editor**

Prof. Dr. Zhenying Zhang

Department of Architecture and Civil Engineering, North China University of Science and Technology, Tangshan 063210, China

# Deadline for manuscript submissions

closed (31 July 2025)



# World Electric Vehicle Journal

an Open Access Journal Published by MDPI

Impact Factor 2.6 CiteScore 5.0



### mdpi.com/si/190855

World Electric Vehicle Journal Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 wevj@mdpi.com

mdpi.com/journal/

wevj





# World Electric Vehicle Journal

an Open Access Journal Published by MDPI

Impact Factor 2.6 CiteScore 5.0



# **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

Prof. Dr. Joeri Van Mierlo

MOBI–Electromobility Research Centre, Department of Electrical Engineering and Energy Technology, Faculty of Engineering Sciences, Vrije Universiteit Brussel, 1050 Brussel, Belgium

## **Author Benefits**

# **High Visibility:**

indexed within Scopus, ESCI (Web of Science), Ei Compendex, and other databases.

# **Journal Rank:**

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q2 (Automotive Engineering)

# **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.6 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

