



an Open Access Journal by MDPI

# Sustainable EV Rapid Charging, Challenges, and Development

Guest Editors:

### Prof. Dr. Salah Al-Majeed

School of Science and Engineering, Al Akhawayn University in Ifrane, Ifrane, Morocco

### Prof. Dr. Grzegorz Sierpiński

Department Transport Systems, Traffic Engineering and Logistics, Faculty of Transport and Aviation Engineering, Silesian University of Technology, Krasińskiego Str. 8, 40-019 Katowice, Poland

Deadline for manuscript submissions: **30 November 2024** 

mdpi.com/si/145584

## **Message from the Guest Editors**

Dear Colleagues,

Electric vehicles (EVs) offer substantially reduced greenhouse gas emissions over traditional vehicles that reduce air pollution, combat climate change, and provide health benefits to the general population. Despite these benefits, EV growth has remained slow within the global market. This is partially attributable to a range of challenges for prospective stakeholders, such as whether EV Rapid Charging Points can store adequate energy levels or longer commutes caused by end-to-end charging systems.

The challenges in developing sustainable solutions have increased dramatically because of Net-Zero and clean energy fast-approaching targets, as well as the political situation. On the other hand, technology, standardisation, manufacturers, and consumers have moved to a higher level, in which there is an urgent need for relatively sustainable end-to-end system approaches.

This Special Issue, therefore, invites all original and reviewed articles covering the challenging aspects of the development of EV charging systems, including but not limited to sustainable EV rapid charging (points, network, and distributions) and sustainable EV rapid storage systems.







an Open Access Journal by MDPI

# **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

### 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.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

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

**Journal Rank:** JCR - Q2 (*Transportation Science and Technology*) / CiteScore - Q2 (*Automotive Engineering*)

# **Contact Us**

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