





an Open Access Journal by MDPI

Railway Vehicle Maintenance 4.0

Guest Editors:

Prof. Dr. Gareth Tucker Institute of Railway Research, University of Huddersfield,

Huddersfield HD1 3DH, UK

Prof. Dr. Simon Iwnicki

Institute of Railway Research, University of Huddersfield. Huddersfield HD1 3DH, UK

Deadline for manuscript submissions:

closed (30 September 2023)

Message from the Guest Editors

In recent years, a range of industries, including manufacturing, aviation and construction, have benefited from developments in increased use of automation, use of modern sensors and data analytics, the Internet of Things (IoT) and process optimization based on machine learning. These developments have been associated with the '4th Industrial Revolution'. There is a significant opportunity to apply some of the same technologies and techniques to improve the efficiency of railway vehicle maintenance. This already starting to occur, especially with the significant increase in the use Remote Condition Monitoring (RCM) systems on new trains. The cost of maintaining railway vehicles is a significant proportion of their whole life cost, up to 40%; further research is required to continue to improve the efficiency and reliability of rail vehicle maintenance.

The Special Issue seeks original research papers from researchers in industry or academia that focus on improving the efficiency, reliability and safety associated with rail vehicle maintenance. Papers describing a clear need for the work with a discussion on the route to implementation are of particular interest.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso

CISE—Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P -6201-001 Covilhã, Portugal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical)

Contact Us