

Special Issue

Wheel–Rail Contact: Mechanics, Wear and Analysis

Message from the Guest Editors

Wheel–rail contact still represents a challenging topic for research as it involves nearly all aspects of railway operations, including the safety, maintenance and management of railways. Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Wheel–rail friction research and management;
- Transverse wear research and management;
- Longitudinal wear;
- Rolling contact fatigue classification, characterization and research;
- Steel metallurgy and heat treatments, welding technologies;
- Maintenance of the wheel–rail pair;
- Wheel–rail parameters' measurements;
- Basic research on the mechanical behavior of materials;
- Feedback from service;
- Wheel–rail management related to noise and vibrations;
- Rolling stock and track/rail geometry interactions;
- Traction chain impact on wheel–rail behavior.

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2025)



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About the Journal

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.

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