



## Mechanical Properties and Performance Analysis of Vehicle Dynamics

Guest Editors:

**Dr. Jarosław Zalewski**

Associate Professor, Faculty of  
Administration and Social  
Sciences, Warsaw University of  
Technology, Plac Politechniki 1,  
00-661 Warsaw, Poland

**Dr. Rafał Kowalik**

Associate professor, Department  
of Avionics and Control Systems,  
Military University of Aviation, Ul.  
Dywizjonu 303 nr 35, 08-521  
Dęblin, Poland

Deadline for manuscript  
submissions:

**20 June 2024**

### Message from the Guest Editors

Dear Colleagues,

This Special Issue is devoted to solving the various problems of vehicle dynamics, relating both to road and rail vehicles as well as aircraft vehicles. Maintenance dynamics is a crucial area which can be a factor determining the safety, ease, and faultlessness of the operation of the means of transport.

Modern technology involves seeking solutions to many problems, mainly related to alternative sources of energy and the issue of autonomy in the means of transport. Of course, this does not mean that only electric or autonomous vehicles are subject to this issue. Vehicle dynamics involves a wide array of complex phenomena typical for each type of a vehicle, regardless of it moves on a road, on a railway, or in the air.

Therefore, the aim of this Special Issue is to collect the latest research of scientists and present selected papers focused on the theoretical, experimental, or simulation aspects of vehicle dynamics.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**

Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## 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, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

## Contact Us

---

Applied Sciences Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/Applsci)