



## New Achievements in Structural Dynamics Analysis

Guest Editors:

**Prof. Dr. Marek Krawczuk**

Institute of Mechanics and  
Machine Design, Faculty of  
Mechanical Engineering and Ship  
Technology, Gdansk University of  
Technology, Narutowicza 11/12,  
80-233 Gdańsk, Poland

**Dr. Magdalena Palacz**

Department of Production  
Engineering, Faculty of  
Management and Organisation,  
Silesian University of Technology,  
Roosevelta 26-28, 41-800 Zabrze,  
Poland

Deadline for manuscript  
submissions:

**closed (10 January 2022)**

### Message from the Guest Editors

Dear Colleagues,

Analysis of dynamic behaviour of structures is very important in today's society because it allows, among other things, the reduction of the costs of prototyping and the prediction of the occurrence of potentially dangerous places during operation in certain defined conditions. Different analytical, numerical, and experimental techniques have been used so far to understand the properties of various structural components. Therefore it would be beneficial to gather in one place the latest achievements in the field of structural dynamic analysis.

It is our pleasure to invite you to submit a manuscript for this Special Issue covering the latest interesting research results from both the scientific and industrial societies. The aim of this issue is to provide the reader with a better understanding of the analysis of such phenomena as various vibration type analyses, dynamic stability of structures, dynamic behaviour of periodic structures, and dynamic behaviour of damaged structures.

Prof. Dr. Marek Krawczuk  
Prof. Dr. Magdalena Palacz  
*Guest Editors*





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)