

Special Issue "CAD in Machinery Design Implementation and Educational Issues"

keywords: CAD, Machinery Design, Design Optimization, Implementation, Simulation, Design for Manufacturing and Assembly

Deadline for manuscript submissions: **December 31, 2023**

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Special Issue Information

Dear Colleagues,

In today's industry, where innovation and efficiency play a crucial role, CAD is an integral part of the machinery design process. However, there are still areas that lack in-depth research and new solutions to meet growing challenges. Therefore, it is important to focus on identifying these research gaps and strive to address them.

One area that requires attention is the development of advanced CAD techniques and tools to optimize the machinery design process. There is a need for more precise modelling and analysis methods that consider the complexity of designs, materials, and technological requirements. Only by filling these research gaps can we achieve higher design quality and production efficiency.

Furthermore, it is essential to study the integration of CAD with other technologies such as artificial intelligence, numerical simulations, and strength analysis. This will enable the development of new design possibilities and the optimization of construction processes.

By publishing their findings, authors have the opportunity to contribute to bridging the gaps in the field and promoting innovative approaches. The published conclusions will be valuable to practitioners, engineers, and scientists interested in improving the design process.

This special issue features selected articles presented at the XXXI International Polish-Ukrainian Conference on "CAD in machinery design implementation and educational issues."

The scope of this Special Issue will provide a forum for reports on the following topics:

- process control, identification, modelling, simulation of processes and systems;
- methods and algorithms in CAD;
- computer applications in engineering;
- CAD tools in Industry 4.0;
- energy systems and environmental protection installations;
- robotics, mechatronics, and automation;
- micro-electromechanical systems;
- information technologies;
- engineering applications of computer science;
- modelling composites and smart materials;
- software, programming and algorithms, databases;
- 3D scanning, printing, virtual devices.

Grzegorz Mieczkowski and Roman Kaczyński
Guests Editors

Manuscript Submission Information

Manuscripts should be submitted via our Editorial Manager system:

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Authors should choose article type: Special Issue " CAD in Machinery Design Implementation and Educational Issues " from the drop-down menu.

Please visit the [Instructions for Authors](#) before submitting a manuscript.