

## Special Issue

# UAV System Modelling Design and Simulation

### Message from the Guest Editors

The scope of the Special Issue will include, but is not limited to, the following topics associated with the modelling and simulation of UAV systems:

- Novel drone designs and architectures;
- Aerodynamic modelling and optimization;
- Flight control and stability;
- High-precision robust and fast maneuver control of UAVs;
- Autonomous navigation and path planning;
- Autonomous localization of UAVs under GPS-denied environment;
- Autonomous/cooperative decision and planning for UAVs/swarms;
- Sensor fusion and perception;
- Application of novel sensing technologies in UAVs;
- Propulsion and power supply systems;
- New discoveries in UAV energy and power systems;
- Artificial intelligence technologies in the field of UAVs.
- Application of innovative design methods:
- Model-based design;
- Model-based system engineering.

We welcome original research articles and review articles that address any of the above topics or related areas. We look forward to receiving high-quality submissions that contribute to the advancement of the field of UAV system modelling, design and simulation.

### Guest Editors

Prof. Dr. Wojciech Skarka

Department of Fundamentals of Machinery Design, Silesian University of Technology, Stanisława Konarskiego 18A, 44-100 Gliwice, Poland

Dr. Miha Brojan

Faculty Of Mechanical Engineering, University Of Ljubljana, Ljubljana, Slovenia

### Deadline for manuscript submissions

closed (30 June 2025)



## Aerospace

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.0



[mdpi.com/si/196681](https://mdpi.com/si/196681)

*Aerospace*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[aerospace@mdpi.com](mailto:aerospace@mdpi.com)

[mdpi.com/journal/  
aerospace](https://mdpi.com/journal/aerospace)





# Aerospace

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.0



[mdpi.com/journal/  
aerospace](https://mdpi.com/journal/aerospace)



## About the Journal

### Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.

*Aerospace* adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

---

### Editor-in-Chief

Prof. Dr. Konstantinos Kontis  
School of Engineering, University of Glasgow, James Watt Building  
South, University Avenue, Glasgow G12 8QQ, Scotland, UK

---

### 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, Ei Compendex, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Aerospace) / CiteScore - Q2  
(Aerospace Engineering)