





an Open Access Journal by MDPI

# **On-Board Systems Design for Aerospace Vehicles**

Guest Editors:

### **Dr. Davide Ferretto**

DIMEAS - Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Turin, Italy

#### Dr. Fabrizio Stesina

DIMEAS - Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Turin, Italy

### Dr. Marco Fioriti

DIMEAS - Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Turin, Italy

Deadline for manuscript submissions:

closed (31 October 2023)

### **Message from the Guest Editors**

This Issue aims to highlight the latest research advancements in the field of on-board systems design for both aeronautics and space vehicles, with a focus on innovative concepts and technologies and environmentally sustainable architectures, ensuring an enhanced product in terms of both performance and economic impact. This Special Issue calls for research, articles, and manuscripts addressing the following topics (although others will be considered):

- High-level design of on-board systems, including functional architecture definition and concept of operation;
- Model-based system engineering practices for aerospace system design;
- Digital twin concepts for aerospace system analysis and design;
- Reliability and safety assessment of on-board systems;
- System architecture optimization;
- More-electric and all-electric on-board system architectures;
- Hybrid–electric systems to support green propulsion plants;
- FDIR systems and strategies;
- Onboard autonomy;
- Development of ground support equipment;
- Innovative guidance, navigation, and control systems for satellites;
- Communication system: intersatellite limbs and multi-beams communication.



mdpi.com/si/125827







an Open Access Journal by MDPI

### **Editor-in-Chief**

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

## **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.

### **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, and other databases.

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

### **Contact Us**