

Special Issue

Mission Analysis and Design of Lighter-than-Air Flying Vehicles

Message from the Guest Editors

This Special Issue aims to collect the outcomes of current research in the field of lighter-than-air (LTA) vehicles, with two particular focal points: the first is on mission study, including novel possible missions for LTA vehicles, the negotiation of specifications, comparisons to other flying machines (also in terms of ground equipment), etc. This shall trace a map of the most likely missions that could potentially be covered by LTA vehicles, accounting for current technology. The second focus is on preliminary design: in principle, electrification enables some advantages, such as an increase in endurance and the achievement of novel control configurations based on thrust vectoring, but an increase in weight may result from the adoption of batteries or other electric components, thus requiring trade-off analysis to select the most promising design solutions. Developing on this focus may produce a knowledge base supporting industrial design processes.

Guest Editors

Prof. Dr. Alberto Rolando

Department of Aerospace Science and Technology, Politecnico di Milano, Via La Masa 34, 20156 Milano, Italy

Prof. Dr. Carlo E. D. Riboldi

Department of Aerospace Science and Technology, Politecnico di Milano, Via La Masa 34, 20156 Milano, Italy

Deadline for manuscript submissions

closed (31 March 2023)



Aerospace

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.4



mdpi.com/si/90807

Aerospace
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
aerospace@mdpi.com

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





Aerospace

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.4



[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, and other databases.

Journal Rank:

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