Special Issue

Conceptual Design and Multidisciplinary Optimization of Electric Vertical Take-Off and Landing (eVTOL) Aircraft

Message from the Guest Editors

The rapidly expanding Urban Air Mobility (UAM) sector, driven by advancements in electric propulsion and automation, is set to transform transportation through the deployment of eVTOL aircraft. This transformation imposes substantial demands on the domain of aircraft conceptual design and development. The conceptual design of eVTOLs presents unique and complex challenges that surpass those associated with traditional fixed-wing aircraft or helicopters. Designers engaged in this critical phase of aircraft conceptual design must navigate the trade-offs inherent in distributed electric propulsion (DEP), manage high power demands within constrained energy budgets, and ensure safe and quiet operation in densely populated urban environments.

Guest Editors

Dr. Yu Hu

School of Aeronautics, Northwestern Polytechnical University, Xian 710072, China

Dr. Xiaoping Xu

1. School of Aeronautics, Northwestern Polytechnical University, Xi'an 710072, China
2. National Key Laboratory of Aircraft Configuration Design, Xi'an 710072, China

Deadline for manuscript submissions

31 July 2026

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/si/263376

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

mdpi.com/journal/aerospace

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/journal/aerospace

MDPI

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, 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)