## **Special Issue**

# Innovations in Unmanned Aerial Vehicle: Design and Development

#### Message from the Guest Editor

The rapid evolution of Unmanned Aerial Vehicles (UAVs) has enabled transformative applications in environmental monitoring, disaster response, agriculture, logistics, and defense. This Special Issue invites original research, reviews, and technical notes that push the boundaries of UAV technology. Topics of interest include but are not limited to:

- Design and Optimization: Aerodynamic designs, lightweight materials, and propulsion systems.
- Flight Control and Navigation: Autonomous navigation, path planning, and multi-UAV coordination.
- Al and Machine Learning: Real-time decision-making, obstacle avoidance, and adaptive mission planning.
- Payload Integration: Sensor and equipment customization for diverse applications.
- Energy Efficiency: Battery technology, hybrid propulsion, and renewable energy integration.
- Safety and Reliability: fail-safe mechanisms, and robust control.
- Regulatory and Ethical Considerations: Certification, airspace integration, and societal impacts.

This Special Issue aims to foster collaboration across academia, industry, and government, driving innovation and exploring the limitless potential of UAVs. Join us in shaping the future of UAV technology.

#### **Guest Editor**

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#### Deadline for manuscript submissions

30 December 2025



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### 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

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