

## Special Issue

# Aerospace Vehicle Optimization: Design Innovations, Thermal Management, and Practical Applications

### Message from the Guest Editor

As the aerospace industry progresses toward more complex missions and increasingly stringent performance requirements, innovation in both design and thermal management has become a critical driver of technological advancement. In design optimization, Multidisciplinary Optimization (MDO) integrates aerodynamics, structural engineering, and materials science, employing advanced algorithms to identify optimal solutions. Aerodynamic layout refinement reduces drag, while structural topology optimization enables lightweight design. This Special Issue invites researchers from around the world to contribute original research, innovative technologies, and practical applications related to aerospace vehicle optimization. Keywords: aerospace vehicle optimization; design methodologies; multidisciplinary optimization; thermal management; liquid cooling; two-phase flow heat transfer; phase change material; hydrogen; heat exchanger

### Guest Editor

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### Deadline for manuscript submissions

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