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# Heat and Thermal Fluid Flow for Advanced Aerospace Propulsion

Guest Editors:

### Message from the Guest Editors

Dr. Zhaoxin Ren

Dr. Qiaofeng Xie

Dr. Jie Lu

Deadline for manuscript submissions: closed (18 August 2023) Dear Colleagues,

We kindly invite you to contribute an article to the Special Issue of the MDPI journal *Energies* on the topic "Heat and Thermal Fluid Flow for Advanced Aerospace Propulsion". An understanding of the heat transfer, fluid dynamics, and combustion process via the utilization of theoretical analysis, experiments, and numerical simulations is important for the engineering application of nextgeneration energy and propulsion systems. This Special Issue focuses on the mechanisms of complex heat and thermal fluid flow, and the associated control methods for advanced aeroengines, such as combined cycle engines, scramjet engines, and detonation engines.

Potential topics include but are not limited to the following:

- Thermal analysis of advanced aeroengines;
- Mathematical modeling and numerical simulation of heat and thermal fluid flow;
- Multiphase flow and heat and mass transfer;
- Test and measurement technology of flow and combustion process;
- Heating and cooling methods of advanced engines;
- Control and organization methods for flow and combustion;
- New propellant technology for aerospace propulsion.









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## **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

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### Message from the Editor-in-Chief

*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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