

Special Issue

Under-Expanded Jets

Message from the Guest Editors

This Special Issue aims to provide quantitative insights into the key sonic and mixing characteristics of under-expanded jets particularly those issued from millimetre-size nozzles. Authors are encouraged to submit high quality manuscripts on analytical, computational (high fidelity modelling) and experimental (advanced quantitative measurement techniques) studies in this field. The topics of interest may include, but are not limited to, free and impinging jets, co and cross-flows, near-nozzle shock structures, Mach disk dimensions and curvature, vortical and coherent structures and shear layers, turbulent mixing characteristics, aeroacoustics and screech tone, shock-shear interactions, viscous effects, farfield characteristics, effects of the ambient medium thermodynamic conditions, effects of the nozzle diameter and topology (lip geometry and exit profile), hydrodynamic instabilities, compressible in-nozzle flows, different jet/ambient fluids, computational modelling with real fluid equation of state and properties, reacting under-expanded jets, numerical methods, such as advanced shock capturing techniques.

Guest Editors

Dr. Paul Bruce

Department of Aeronautics, Imperial College London, London SW7 2AZ, UK

Dr. Arash Hamzehloo

Faculty of Engineering, Department of Mechanical Engineering, Imperial College London, London SW7 2AZ, UK

Deadline for manuscript submissions

closed (30 April 2018)



Aerospace

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 4.0



mdpi.com/si/11609

Aerospace
Editorial Office
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 4.0



[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, Ei Compendex, and other databases.

Journal Rank:

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