



an Open Access Journal by MDPI

Advances in Combustion Diagnostic Methods for Aerospace Propulsion

Guest Editors:

Dr. João Melo de Sousa

IDMEC, Mechanical Engineering Department, Instituto Superior Técnico, University of Lisbon, 1049-001 Lisboa, Portugal

Prof. Dr. Mário Costa †

Instituto Superior Técnico, University of Lisbon, 1000-001 Lisbon, Portugal

Deadline for manuscript submissions: closed (30 June 2019)

Message from the Guest Editors

This Special Issue aims to provide an overview of recent advances in combustion diagnostics methods and its application to aerospace propulsion. Authors are invited to submit full research articles and review manuscripts addressing (but not limited to) the following topics:

- Coherent anti-Stokes Raman spectroscopy (CARS) diagnostics of high-pressure and hightemperature gases
- CARS thermometry
- Laser-induced grating spectroscopy
- Tunable diode-laser absorption spectroscopy
- Raman scattering
- Rayleigh thermometry
- CARS detection of radicals
- Laser-induced fluorescence (LIF) for radicals and combustion products
- LIF for mixing and kinetics measurements in gasphase flows
- LIF and other optical measurements of soot
- Time-resolved LIF
- Particle image velocimetry (PIV)
- Simultaneous PIV and concentration measurements
- Laser tomography









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Konstantinos Kontis

School of Engineering, University of Glasgow, James Watt Building South, University Avenue, Glasgow G12 8QQ, Scotland, UK

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.

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)

Contact Us

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