

Special Issue

Towards Gas Turbines Adapted for Net Zero Carbon Power Systems

Message from the Guest Editors

As fossil fuel thermal power generation is progressively phased out, gas turbines emerge as the best thermal power generation technology capable of converting hydrogen to electricity at scale and with high efficiency and low emissions.

In this context, the current Special Edition aims to provide an overview of the activities of the research and development community in the fields of novel approaches in gas turbines. The focus lies on activities directed toward the adaptation of the technology for its application in a decarbonized society. Research articles mainly on (but not strictly limited to) the following topics are welcome:

- Hydrogen in gas turbine applications;
- Concentrated solar power gas turbines;
- Pressure gain combustion in gas turbine applications;
- Fuel cell–gas turbine hybrids;
- Biomass fired gas turbines;
- Alternative applications of the Joule–Brayton cycle.

Guest Editors

Dr. Panagiotis Stathopoulos

German Aerospace Center (DLR), Institute of low-CO₂ industrial processes, High temperature heat pumps department, Cottbus 03046, Germany

Prof. Dr. Myles Bohon

Institute of fluid dynamics and technical acoustics, Chair of Pressure Gain Combustion, Technical University of Berlin, Berlin 10623, Germany

Deadline for manuscript submissions

closed (28 February 2021)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/57369

Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)