



Influence of Biofuel Additions on the Ignition Delay of Single Diesel Fuel Drops

Guest Editor:

Dr. Laurencas Raslavičius

Department of Transport
Engineering, Kaunas University of
Technology, 51424 Kaunas,
Lithuania

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editor

Dear Colleagues,

The present issue constitutes a reexamination of the problem of liquid biofuel–diesel droplet combustion and will therefore discuss experimental, theoretical, and computational research dealing with droplet ignition delay phenomena.

Examples of such cases include but are not limited to:

- The droplet ignition in a high-pressure environment;
- Ignition of bi-component and multicomponent droplets of oxygenated diesel fuel;
- The effects of 1st–4th-generation biofuel additives on ignition delay of diesel fuel droplets;
- The application of droplet theories with a special emphasis on ignition delay to the modeling of various combustion systems;
- Determination of ignition characteristics of the droplets containing biological additives that are not yet commercialized and could potentially be produced from hundreds of different industrial and non-industrial species, like algal biomass;
- Quasi-steady and unsteady models for the ignition of a fuel droplet in a stagnant environment;
- Convective effects on droplet ignition.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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

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.

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)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](#)