

Special Issue

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

Message from the Guest Editor

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.

Guest Editor

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