

## Special Issue

# Large-Scale Turbulent Premixed Combustion: Challenges, Aspects and Perspectives

### Message from the Guest Editor

In different process industries, accidental flammable gas release can lead to the formation of a premixed explosive air–gas mixture. If ignited, the resulting explosion can present a potential danger due to its effects on people and property. The main parameter related to the severity of the explosion is the generated overpressure. This overpressure is the result of a complex interplay between the properties of the mixture at hand, the geometry of the industrial structure, and the turbulence levels associated with flame development. To study this phenomenon is a very challenging task, both from computational and experimental points of view. The modelling/prediction of explosion consequences becomes even more complicated due to presence of different emergency devices. We are inviting fresh contributions for this Special Issue in the area of large-scale turbulent combustion and its interaction with safety devices and structures, both from computational and experimental points of view.

### Guest Editor

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### Deadline for manuscript submissions

closed (25 December 2023)



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### Message from the Editor-in-Chief

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