



Pool Fire Behavior in Wind

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Message from the Guest Editors

A pool fire is defined as a diffusion flame established on top of a horizontal fuel surface. According to statistics, it is one of the most frequent accidents that occurs in industrial production and the transportation of hazardous materials. Pool fire disasters mostly occur in open space, and environmental wind commonly plays a role. Pool fire behavior is then driven by the coupling of buoyancy and wind. In addition to changing the flame geometry by tilting it, wind can also affect the heat feedback mechanisms, as well as the interaction between fuel–air in mixed-buoyancy and boundary-layer diffusion combustion.

This Special Issue aims to provide selected contributions regarding the flame geometry, heat transfer mechanisms, and gas flow characteristics of pool fires in wind. Potential topics include, but are not limited to:

The flame geometry of pool fires and the wind heat transfer mechanisms of pool fires;

The heat feedback of pool fires in wind;

The gas flow characteristics of pool fire behavior in wind;

The gas temperatures of pool fire behavior in wind;

The mixture fraction of pool fire behavior in wind.

