



Dynamics of Wind-Fire Interaction: Fundamentals and Applications

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Message from the Guest Editors

Dear Colleagues,

Wind is an important boundary condition in realistic fire scenario. Wind will modify the heat transportation, fuel-oxygen mixing, and flow field structure in fire, and will be induced by fire burning behavior and in turn affect the fire growth.

The Special Issue aims to seek novel papers that address important issues in wind-fire interactions. The scope of this issue is to gather original, fundamental, and applied research that contribute towards the understanding of dynamics of wind-fire interaction. Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Heat feedback and burning rate under wind;
- Flame stability under the influence of cross airflow;
- Flame spread and extinction behavior with the effect of wind;
- Fire plume characteristics under wind;
- Human behaviors and structural safety in fire under wind;
- Influence of fire-induced wind on fire growth;
- Fire detection and suppression, risk analysis and management;
- Applications of the dynamics of wind-fire interaction;
- Case study of fire accident.

We look forward to receiving your contributions.

