



Improving Process Safety in the Chemical Industry: Fundamental and Advanced Research

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Message from the Guest Editors

This Special Issue aims to present recent progress on the prevention, mitigation and management of process hazards and risks leading to incidents, such as fire, explosion and toxic releases. The scope of this Special Issue is thus concerned with advancements of safety related to the use, storage, manufacture, handling, and transportation of highly hazardous chemicals. The topics include, but are not limited to, the following:

- Process safety management;
- Process safety culture;
- Fundamental issues of safety;
- Incident investigation;
- Design and reliability of protective systems;
- Process alarm management;
- Emergency planning;
- Process fires;
- Gas and dust explosions;
- Dispersion of toxic materials;
- Runaway reactions;
- Safety in decarbonized processes;
- Safety of chemical energy vectors (hydrogen, batteries, etc.);
- Inherently safer design;
- Human error/human factors;
- Risk assessment;
- Process safety education and training;
- Domino effect;
- Cascading events





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Message from the Editor-in-Chief

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