



an Open Access Journal by MDPI

Probabilistic Risk Assessments in Fire Protection Engineering

Guest Editors:

Prof. Dr. Hans Pasman

Chemical Engineering Department, Texas A&M University, College Station, TX, USA

Dr. Qingsheng Wang

Department fo Chemical Engineering, Texas A&M University, College Station, TX 77843-3122, USA

Deadline for manuscript submissions: closed (31 May 2024)



Message from the Guest Editors

Dear Colleagues,

We are pleased to invite you to contribute your research relating to a challenging topic in engineering. For this Special Issue one can think of the following topics and other:

- Databases that enable extraction of probability values
- Quantitative simulation of fire propagation (Bayesian and Petri network)
- Quantitative evaluation of risk reduction measures:
 - to reduce the chance of fire initiation
 - to limit fire propagation
 - materials choice
 - structural measures
 - layout both process plant and urban planning
 - enhancing early detection
 - to reduce so-called domino effect
- Enhancing the probability of effectively fighting fire.
- Improving the probability not to be suffocated/poisoned by smoke
- Improving the probability not to be injured by radiant heat
- Probability of successful evacuation from fire situation
- Cost-effectiveness considerations based on fire risk assessment
- Ranking measure options and decision making



mdpi.com/si/145382