DESCRIPTION

PSEP aims to be the principal international journal for publication of high quality, original papers in the branches of engineering concerned with the safety of industrial processes and the protection of the environment.

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Risk Assessment and Reliability Engineering
- Risk assessment, risk management, consequence analysis, and uncertainty quantification.
- Supply chain risk management.
- Cyber and physical security vulnerability assessment.
- Risk assessment of hydrogen-based technologies.
- Human reliability analysis (HRA) and human-machine interface (HMI).
- Reliability predictions of integrated systems and high-temperature power electronics.
• Integrity management and reliability, availability and maintainability (RAM).

Technical Safety and Loss Prevention
• Fire and gas detection.
• Firewater systems.
• Functional safety and safety integrity levels (SIL)
• Layer of protection analysis (LOPA)
• Bowtie analysis.
• Emergency response
• HAZOP and other hazard/risk identification techniques.

Modelling
• Modelling liquid, gaseous, and two-phase releases and dispersion.
• Consequence modelling, including: fire, explosion, toxic, eco-toxic effects and projectile impacts.
• Methods, including computational fluid dynamics (CFD).
• Accident investigation and modelling.

Chemical Toxicity and Exposure Assessment
• Toxic releases and exposure assessment.
• Process plant health issues.

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• Fire, combustion, and explosion phenomena.
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• Methodologies for ranking inherent safety.
• Retrofitting inherently safer solutions and upgrading existing plant for improved safety.

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• Technical analysis of incidents.
• Computational modelling to simulate actual incidents
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• Methods and technologies for prevention and treatment of air pollution
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• Prediction and mitigation of air pollution incidents
• Health impacts from air pollution

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• Waste minimisation
• Waste treatment technologies
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• Landfill and waste repository design, operation and management
• Land remediation and recovery

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