EFCE Spotlight Talks

Working Party on Loss Prevention and Safety Promotion in the Process Industries

8 November 2024

14:00-16:30 CET

EFCE

Safety challenges in the era of energy and digital transition

While embracing renewable energy sources yields benefits such as decreased environmental impact and enhanced energy efficiency, it presents novel and evolving risks needing effective management. The new technologies and processes entail new hazards and much effort is going into renewal, with improvements in the concept of hazard identification and scenario definition becoming possible due to the digitization of the industry and the availability of data. The ongoing transformation requires that industrial organizations adapt their strategies and processes to harness the best new technologies while also making the most of the assets and resources already deployed. The rapid growth of AI in operational safety highlights future improvement areas while posing challenges like data availability, quality, trust, and explainability. The spotlight talk will give a flavor of the topics that will be covered in the 18th EFCE International Symposium on Loss Prevention and Safety Promotion in the Process Industries planned in Italy in 2025, to stimulate the development of new methods to reduce the risk of incidents/accidents in the process industries.

World-class experts will provide you with a vision of new approaches, examples of good practice, current thinking and lessons learned in process safety, including main challenges and technologies that align with sustainability goals, with a focus on:
- the transformative journey of safety culture management, highlighting the alignment of the strategic goals with effective management practices;
- the management of process risk and lessons learned from practical experience to prioritize safety and operational excellence;
- emerging risks and challenges of new energy carriers, like ammonia and liquid hydrogen, and new technologies involved;
- AI approaches in safety and reliability and interpretative analysis based on data type statistics, preprocessing, and algorithms.
Participants from both academia and industry are very welcome.

PROGRAM

14:00 **Welcome and introduction**
Bruno Fabiano, Chair of Working Party on Loss Prevention - DICCA Univ. of Genova - Italy
Boelo Schuur, EFCE Scientific Vice-President

14:10 **Safety Culture: challenging emotional biases with data**
Alexis Pey, STAHL HOLDINGS B.V., Barcelona - Spain

14:35 **Explosion in a wastewater tank - consequences - causes – measures**
Marc Steinkrauss, PELEVEN AG, Basel - Switzerland

15:00 **Safety Challenges in the exploitation of the Liquified Hydrogen value chain**
Alessandro Tugnoli, University of Bologna -I taly

15:25 **Examining safety risks of ammonia-fuelled ships. New Hazards related to the energy transition**
Ming Yang, Rustam Abubakirov, Delft University of Technology, Delft - The Netherlands

15:50 **How is artificial intelligence used for safety and reliability across industry?**
Nicola Paltrinieri, NTNU - Norway

16:15 **Concluding remarks**
Bruno Fabiano, Chair of Working Party on Loss Prevention

[REGISTRATION](#)
free of charge but mandatory

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