

EFCE Spotlight Talks

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

24 November

13:30 • 15:30
CET

Engineering Loss Prevention and Safety 4.0

Loss Prevention and Process Safety are matters that continuously demand attention and improvement; these must continuously renovate and innovate, every day again following scientific research and developments. Many challenges are still to be addressed in order to make further progress in safety and sustainability of plants and processes in a full transition towards Safety 4.0. From one side, the emphasis on digitalisation is about identifying the benefits of this technology to the management of major hazards, from the other side it is connected to the need of ensuring the risks of the technology are understood and correctly managed. This webinar will provide you a vision of new approaches needed to re-engineering process safety and the way technological risk should be managed.



World class experts in the field will address four main challenges:

- how resilience analysis covering both plant and management system level should hedge for the unexpected and unknown, thus contributing to loss prevention, business continuity and sustainability;*
- challenges in process safety related to NaTech scenarios, an emerging risk in close relation with climate change and increase in frequency, intensity, duration and spatial extent of extreme weather events;*
- new concepts and tools for asset integrity, including probabilistic digital twins, information theory based probabilistic risk assessment and machine learning based approaches;*
- how cluster-thinking for safety and security improvement is the way forward for resilient and profitable chemical clusters.*

PROGRAM

Introduction

Bruno Fabiano, Chair of Working Party on Loss Prevention, DICCA University of Genova – Italy

What is Plant Resilience, and Why is it a necessity ?

Hans J. Pasma, Texas A & M University, Texas - USA

Natech Scenarios due to the Interaction of Chemical and Natural Hazards: a new Challenge for Process Safety

Valerio Cozzani, University of Bologna – Italy

Condition monitoring-based Asset Integrity Management in the Process Industries

Ming Yang, TU Delft - The Netherlands

Safety and Physical Security in (Petro)Chemical clusters: a part of Engineering Loss Prevention of the Future

Genserik Reniers, TU Delft - The Netherlands ; KULeuven – Belgium

[registration](#)

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