

# EFCE Spotlight Talks

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

17 May

14:00 • 16:15  
CET

### Emerging Risks and Advanced Modelling within the Process Safety Horizon



*The world is changing, the traditional boundaries of engineering are merging and there will be more stringent requirements of energy use, product quality, market adaptability, safety and environmental protection and further higher plant complexity. Advanced techniques are progressively providing reliable support for critical decision making and guiding the industry towards more risk-informed and safety-responsible planning, even though serious safety concerns need to be addressed when adopting digitalization. The role of process engineering should include a critical and balanced application of new developments in data science and digital technology with fundamentals science and engineering principles. Additionally, system thinking and process safety could be a real benefit to entirely different sectors and perhaps unexpected areas, according to cross-fertilizing assumptions and trans-disciplinary research modelling. This webinar will provide you with a vision of new approaches and advanced techniques illustrating the interdisciplinary features of the problem.*

*World class experts in the field will address a comprehensive discussion on selected themes focusing on four main challenges:*

- dynamic risk management approach and system advances from a holistic digitalization perspective;*
- challenges and limitations of machine learning techniques in evaluating the safety level in industrial systems;*
- early warning detection of Covid 19 based on reaction safety methodologies, as an example of a cross-industry learning approach;*
- emerging risks and challenges towards a reliable risk assessment following digitization and system approach.*

#### PROGRAM

- 14:00      **Welcome and introduction**  
Bruno Fabiano, Chair of Working Party on Loss Prevention and Safety Promotion
- 14:10      **Safety of Digital Process Systems**  
Faisal Khan, Memorial University of Newfoundland St John's - NF Canada
- 14:35      **Are Big Data taking Industry towards a "No-brainer" Safety?**  
Nicola Paltrinieri, NTNU - Norway
- 15:00      **Q&A – discussion**
- 15:10      **From Reaction Safety Modelling towards Pandemic Risk Early Detection**  
Giuseppe Maschio, University of Padova - Italy
- 15:35      **What about Emerging Process Risks and Risk Management?**  
Hans J. Pasman, Texas A & M University, Texas - USA
- 16:00      **Q&A - conclusions and closing**  
Bruno Fabiano, Chair of Working Party on Loss Prevention

[Registration and Payment](#)

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