

**108<sup>th</sup> Meeting****October 27<sup>th</sup>, 2022**

Virtual meeting

**Minutes**

10.00 h Start

## 1) Introductions and apologies

Participants: 15 members of WPLP - Bruno Fabiano, Ales Bernatik, Adam Markowski, Bin Zhang, Genserik Reniers, Joachim Sommer, Jurgen Schmidt, Luc Vijgen, Valerio Cozzani, Ludovit Jelemensky, Manuel Rodriguez, Mats Lindgren, Thierry Meyer, Zorka Novak Pintaric, Eddy de Rademaeker

Apologies: N. Paltrinieri, T. Koerts, F. Babinec, Agnieszka Gajek, H. J. Pasman, N. Markatos

## 2) LPWP membership

Invited at 107LPWP: Bin Zhang

TOTAL: 26 (including 2 honorary members) + 5 guest members

Delegates - Slovenia, Spain, Greece, UK each one open position.

No delegates of Austria, Bulgaria, Croatia, Denmark, Hungary, Romania, Turkey, Ukraine, etc.

BF reported about the ongoing effort in extending delegates appointment from missing Countries and replacement of silent members.

## 3) Minutes of last LPWP meeting and actions arising

<u>Action Number</u>	<u>Meeting Number</u>	Action	<u>Responsible</u>	Notes	Status
1	106	AP and sub-group to produce final version of reference guidelines.	AP	Covered by Agenda sub 7	Final drafts
2	107	Update (matrix) program LPS 2025 and possible new keywords	All	Covered by Agenda sub 5	Ongoing
3	107	Contribution of LPWP to EFCE Spotlight Talk Fall 2022 edition – future edition	All		Done

## 4) LP2022 Final Evaluation

AB provided an extensive final report and statistics regarding Praha Symposium. main findings summarized in the following were presented and discussed.

Submitted abstracts: 182

Accepted abstracts: 177

Submitted full papers: 142

Accepted full papers: 140

- for oral presentation: 88
- for flash presentation & e-poster: 27
- for e-poster: 25

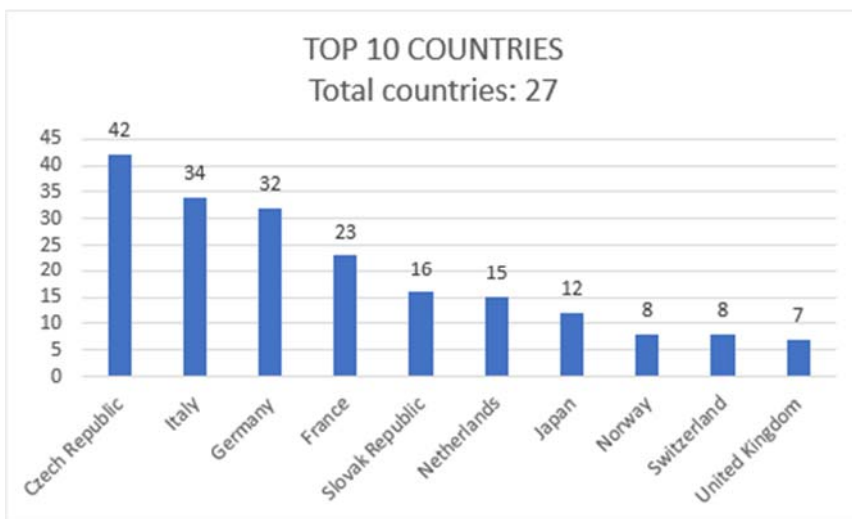
on-line speakers: 23  
on-site speakers: 83

Full papers from 21 countries:

30 Italy	2 Brazil
23 France	2 Spain
16 Czech Republic	2 Switzerland
15 Germany	2 Taiwan
11 Norway	2 United Kingdom
8 Japan	1 Canada
7 China	1 Greece
6 Netherlands	1 Russian Federation
4 Poland	1 Sweden
3 Slovakia	1 United States
2 Australia	

**Registration overview:**

PARTICIPATION	NO.
IN-PERSON	203
REMOTE	45
ACCOMPANYING PERSON	6
<b>TOTAL</b>	<b>254</b>



**Registration over time**

December, 21 - 2  
January, 22 - 32  
February, 22 - 61  
March, 22 - 36  
April, 22 - 60

May, 22 - 57

June, 22 - 6

**Participants portfolio:**

Industry: 33 %  
Universities: 33 %  
Authorities and Research: 18 %  
Individuals or unspecified: 16 %

**Final results comparison:**

LP2007 Edinburgh	198 Abstracts	165 Accepted 151 Full papers	432 Delegates
LP2010 Brugge, B	241 Abstracts	171 Full papers	356 Delegates
LP2013 Florence, I	231 Abstracts	163 Full CET papers	315 Delegates
LP2016 Freiburg, D	257 Abstracts	200 accepted 188 submitted 161 CET papers	470 Delegates
LP2019 Delft, NI	305 /286 Abstracts	200 Full CET papers + 42 non scientific poster	419 Delegates
LP2022 Praha, Czech Republic	182 /177 Abstracts	142 submitted 140 Full papers 135 on CET	254 Delegates

Feedback evaluation forms were submitted to all delegates during the Symposium.

According to discussion future actions to be considered include

For next LPS2025 consider distribution during the registration procedure?

How to improve response rate?

5) LP2022 Rome preliminary information and lessons from previous symposium

From LP2022 to LP2025 □ June 2025

Reduce in time and improve review process

Revision of time scheduling

New safety trends or more emphasis on specific topic

Matrix style of symposium topic – discussion on the modification of topics matrix.

6) Papers from LPS2022 for selected journals

BF presented the results regarding the selection by LPWP delegates of papers presented at the Symposium for possible publication on virtual Special Issue of scientific journals.

Corresponding authors will be invited to submit within 31<sup>st</sup> December 2022 an amply revised version of their work which will be subject to the journal's standard peer review procedure, whereby all manuscripts are refereed by at least two independent reviewers.

Resulata are summarized in the following.

**PSEP SI**

<b>Corresponding author</b>	<b>Provisional title/content</b>
Natalie Schmidt	Experimental Investigation and CFD Modelling of Storage Tank Breathing

van Wingerden	The effect of solid inhibitors on hydrogen-air combustion
Iaiana	Risk Identification for Cyber-Attacks to the Control System in Chemical and Process Plants
Vairo	Fuel cells for shipping. An Approach towards Dynamic Safety Assessment
Ian Clarke	The hazards of transient operations
Hansen	CFD-modelling of Large-scale LH2 Release Experiments
Xu	An Exploratory Study on Uncertainty Analysis in Quantitative Risk Assessment of Domino Effects
Bai	Integrating Knowledge Graph, Complex Network and Bayesian Network for Data-driven Risk Assessment
Spitzer	Comparative Study on standardized ignition sources part 2: Exploration of the initial igniting volume of standardized ignition sources for the determination of explosion characteristics
Janosovsky	Recognition of process safety position in multiple-criteria decision analysis in process design
Tribouilloy	Flammability of Halogenated Liquids: Flash Points Limits
Stewart Behie	Keynote paper “Leadership 4.0: The Changing Landscape of Industry Management in the Smart Digital Era”

### JLPPI SI

REF	Corresp author	Provisional title/content
1	Carsten Schmidt	Protection of chemical reactors against exothermal runaway reactions with smart overpressure protection devices
2	Polka	Analysis of the ability to spontaneous combustion and ignition from hot plate of dried sewage dust
3	Yang	Analysis of human and organization factors related accident reports based on natural language processing
4	Mocellin Paolo	A Numerical Study of Effects of an Industrial Hazardous Release On People Egress
5	Polednik	Autoignition Temperature of Alcohol/air mixtures
6	Lee	Digital Twin Concept for Risk Analysis of Oil Storage Tanks in Operations: a Systems Engineering Approach
7	Palazzi	Critical Issues in Short-cut Modelling of Massive Carbon Dioxide Release
8	Van Wingerden Kees	Medium-scale Tests to Investigate the Possibility and Effects of BLEVEs of Storage Vessels Containing Liquified Hydrogen
9	Shuaiqi Yuan	An Approach for Identification of Integrated Safety and Security Barriers in the Chemical Process Industries
10	Labovska	Safety Analysis as Integral Part of Chemical Processes Intensification and Integration
11	Jastrzembski	Flashpoint of Battery Mixtures in Order to Improve their Safety
12	Le Coze	Risk analysis: Challenges and Perspectives

**Papers from Loss Prevention Symposium 2022 for publication on  
Loss Prevention Bulletin (IChemE)**

Key Learnings From Recent Lithium-ion Battery Incidents that have impacted e-mobility and Energy Storage Fast Growing Markets  
guy.marlair@ineris.fr

Learning from Incidents at Seveso Sites: a Focus on the Safeguarding of Containments Prior to Start of Operations  
henkjan.manuel@rivm.nl

Explosion of 14th January 2020 at IQOXE  
simon-mark.egan@solvay.com

Ammonia Pressure Station in SEVESO Establishment – Case Study Focused on the Impact on the Environment  
katerina.sikorova@vsb.cz

Review of Selected Chemical Accident Report Sites Regarding Major Accident Investigation and Lessons Learned Needs  
dobes@labrisk.cz

7) WP terms of reference update

Draft version was circulated after final approval it will be submitted to EFCE and published on the website.

Sections to be completed:

8. Positioning and Relations

8.1 Academia (OK)

8.2 Industry

8.3 Regulators

The section 8.2 and 8.3 will be completed respectively by AP and LV. They will send the final sections to BF and AP and the final draft will be discussed among all delegates and uploaded on LPWP website.

8) News from EPSC and EFCE

BF reported an update regarding EFCE activities and recent board nominations:

- Prof. Giorgio Veronesi (Italy) President of EFCE
- Prof Petr Kluson (Czech Academy of Sciences, Prague) Scientific Vice □ President
- Prof. Jarka Glassey (Newcastle University, U.K.) Executive Vice □ President

EFCE E □ Newsletter October 2021, distributed

REPORT ON LPWP Activities June 2021 □ June 2022 presented at EFCE WP Chairs meeting

EFCE launched the Spotlight Talks – 4<sup>th</sup> Series wher LPWP will contribute covering the topic:

Safety and risk of energy transition, scheduled 22nd November 2022 h. 14:50

The program includes:

“Process Safety challenges related to energy transition” by M. Rigolio, Tecnimont, Italy.

“New Hazards related to the Energy Transition” by T. Koerts EPSC, Germany;

“Risk management and trade-off in the energy transition framework” V. Cozzani, Italy

"Process industry safety challenges by new energy carriers/materials and new process types" H. J. Pasman and E. Sripaul, MKOCPSC, Texas A&M University, United States.

Future events

Series "European Forum on New Technologies" new topics from WPs are searched.

Next event of EFCE Forum on New Technologies – Paris, 5<sup>th</sup> December 2022.

33<sup>rd</sup> European Symposium on Computer Aided Process Engineering (ESCAPE33) Athens, Greece, 18-21 June 2023 (EFCE Event No. 794) Website: <https://escape33ath.gr/>

15<sup>th</sup> Mediterranean Congress of Chemical Engineering □ MECCE Barcelona, Spain, 29 May – 2 June 2023 (EFCE Event No. 788) by the SEQUI (SOCIEDAD ESPAÑOLA DE QUIMICA INDUSTRIAL E INGENIERIA QUIMICA) in conjunction with Expoquimia 2023 Deadline for abstract submission: 31 January 2023 Website: <https://www.mecce.org>

14<sup>th</sup> European Congress of Chemical Engineering, Berlin 17-21 September 2023 Deadline for submission of abstracts for oral presentations: 15 January 2023 Website: <https://ecceecab2023.eu/>

EFCE has set up a new digital presence: the EFCE website at <https://efce.info/> allows easy use on PC, tablet and smartphone. It also includes a data management system with a single sign on and smart data access. It contains direct link to LPWP website : <https://www.lossprevention-wp.eu/>

## 8.2) EPSC

Remember that everybody can now subscribe onto the Learning Sheet mailing list through this link:

<https://epsc.be/Extra+pages/Learning+Sheets+Mailing+List.html>

The 2<sup>nd</sup> EPSC Conference on Plant & Process Safety took place on 13 & 14 September 2022 in Antwerp, Belgium. The conference in Antwerp was a huge success with 275 participants and 22 exhibitors in the Network Forum.

The 3<sup>rd</sup> EPSC Conference on Plant & Process Safety is planned on 13 & 14 December 2023 in Maastricht, The Netherlands.

## 9) Incidents

No incidents reported.

## 10) Any other Business + date & venue of next meeting

### **NEXT MEETINGS**

Online meeting 2<sup>nd</sup> February 2023, 10:00

Present meeting 15-16th June 2023, Barcelona

12.30 h End

*Appendix 1. presentation of BF*