Agenda (08/31/2023)
Conference Venue: Steigenberger Parkhotel, Nimes-Straße 2, D-38100 Braunschweig, Germany

| September 04, 2023 Monday |  |  |
| :---: | :---: | :---: |
| 08:00 Registration |  |  |
| Session I | Welcome |  |
| 08:30 Jürgen Schmidt\| Georges Melhem | CSE Center of Safety Excellence / ioMosaic | Welcome to Joint DIERS User Group Meeting |
| 08:45 Michael Davies | Braunschschweiger Flammenfilter GmbH | Introducing Braunschschweiger Flammenfilter \& PROTEGO |
| Session II | Low-Pressure Vents \& Flame Arresters |  |
| 09:00 Natalie Schmidt | CSE Center of Safety Excellence | Experimental Investigation and CFD Modelling of Storage Tank Breathing. |
| 09:45 Davide Moncalvo | Braunschschweiger Flammenfilter GmbH | DiERS Guideline on Flame Arrester |
| 10:30 Coffee Break |  |  |
| 11:00 Josep Basco | Universitat Rovira I Virgili, Tarragona, Spain | A new approach based on the Safety Life Cycle analysis to increase the reliability of pressure-vacuum valves |
| 11:45 Tijs Koerts | EPSC | Mechanical failure during PSV release in relation to auto-refrigeration and chattering |
| 12:30 Lunch |  |  |
| Session III | Risk Management \| Reaction Calorimetry |  |
| 13:30 Georges Melhem | ioMosaic | Latent Heat Considerations for Pressure Relief Design |
| 14:15 Carine Huizenga | Shell Global Solution International B.V. | Reactive Hazards in Biomass Processing |
| 15:00 Coffee Break |  |  |
| 15:30 Brittany Armstrong | Merck | ARC Study of an Exothermic Decomposition in an MSA-mediated Fluorination Reaction |
| 16:00 Jerome Ferreira | DuPont Specialty Products GmbH \& Co. KG | Low vapor pressure chemicals - Trying to avoid runaways. |
| 16:30 Min Sheng | East China University | Limitations of Stossel classification method as a reactivity hazard assessment standard of chemical plants |
| 17:00 End of Meeting |  |  |

19:15 Meeting point: Steigenberger Parkhotel
19:30 Dinner (sponsored by Braunschweiger Flammenfilter)

September 05, 2023
Tuesday

| Session IV |  | Pressure Relief \& Sizing |  |
| :---: | :---: | :---: | :---: |
| 08:30 | Dan Wilkes | ioMosaic | A review of relief sizing methodologies for vapor breakthrough scenarios |
| 09:00 | Carsten Schmidt | CSE Center of Safety Excellence | SmOP: Intelligent "zero emission" pressure relief device |
| 09:45 | Michael Davies \| Davide Moncalvo | Braunschweiger Flammenfilter GmbH | Considerations on tank header design to achieve zero emission and stable valve performance |
| 10:30 | Coffee Break |  |  |
| 11:00 | Csaba Hos | Budapest University of Technology and Economics | Effect of lift restriction and multicomponent flow on PRV stability |
| 11:30 | Gergely Keszthelyi | CSE Center of Safety Excellence | Evaluation of one-dimensional models to predict chatter in spring-loaded pressure relief valves for gas service |
| 12:00 Lunch |  |  |  |
| Session V |  | Al supported Safety |  |
| 13:00 | John Barker | ioMosaic | Use of computer vision algorithms to automate the early scoping of new projects |
| 13:45 | Jens Denecke | CSE Center of Safety Excellence | Automated HAZOPs - state of the art and future development? |
| 14:15 | James Close | ioMosaic | Modelling Battery Energy Storage System Explosions Using Deflagration Dynamics |
| 15:00 | Coffee Break |  |  |
| Session VI |  | Explosion Prevention \& Lessons learnt |  |
| 15:30 | Saskia Schrewe \| Corc Bahcecioglu | REMBE® ${ }^{\circledR} \mathrm{mbH}$ Safety+Control | It's not only the SIZE that matters! - Practical points to consider when specifying a rupture disc |
| 16:00 | Brad Luckman \| Michael Davies | PROTEGO UK \| Germany | Lessons Learned - Preventing Early Relief in LPG Storage |
| 16:30 | Benjamin Doup | Fauske \& Associates | DiERS (US) Round-Robin Testing Update |
| 17:00 | End of Meeting |  |  |


| September 06, 2023 |  |  |
| :---: | :---: | :---: |
| Wednesday |  |  |
| Session VII | Valve Instability |  |
| 09:00 Georges Melhem | ioMosaic | Bridging the 3 \% rule Gap |
| 09:45 Ingo Ludwig | REMBE® ${ }^{\circledR}$ GmbH Safety+Control | Of belts and braces (Design of new and existing emergency relief systems) |
| 10:30 Coffee Break |  |  |
| 11:00 Leonid Korelstein | PSRE Co | Two dimensional interpolation of multiphase fluid properties and its usage in fluid flow analysis |
| 11:45 Team Rembe | REMBE® GmbH Safety+Control | Live presentation at the courtyard |
| 12:30 Lunch |  |  |
| Session VIII | Pressure Relief \& Sizing \| Functional Safety |  |
| 13:30 Freeman Self | Bechtel Schlumberger | Pressure Relief Valve Orifice Sizing Using Numerical Integration |
| 14:00 Harigopal Attal | HariAttal Process Safety | You have "safeguard(s)" in place; Sounds promising, but have you tested it? Act before it is too late |
| 14:30 Coffee Break |  |  |
| 15:00 Closing remarks \& discussion |  |  |
| 16:00 End of the meeting |  |  |

Visit at PROTEGO Sites (draft)
07:30 Steigenberger Parkhotel Parkhotel
08:30 Group 1 Group 2
10:30 Group 1 Group 2
13.30 All

14:30 All
16:00 All
16:30 All

08:00 Steigenberger Bus transfer group 2 to PROTEGO to Production Site
Bus transfer group 1 to PROTEGO Test Center in Lehre

Large scale explosion experiments at the test center in Lehre Current State of Manufacturing at PROTEGO Production Site
Bus transfers to other locations until 12:30
Bus transfers to other locations until 12:30

Lunch
Final discussion
Bus transfer back to Steigenberger Parkhotel.
Arrival Parkhotel

