6th CCPS GSPS Call for abstract

Summit Date- 14-16 December 2021

6th CCPS GSPS Call for abstract topics

The Center for Chemical Process Safety (CCPS) invites process safety professionals to submit an abstract for inclusion in the 6th Global Summit on Process Safety (GSPS). The summit will be held virtually from 14th to 16th December 2021.

1. Committed Culture
2. Vibrant Management Systems
3. Disciplined Adherence to Standards
4. Intentional Competency Development
5. Enhanced Application of lessons learnt
6. Big Data and Data Analytics in Process Safety
7. Asset Integrity Management & Aging Facilities
8. Security and Cyber Security in Process Industries
9. Process safety challenges during and post COVID-19

Submit abstract by

September 30, 2021

Submit abstract here-

https://aiche.confex.com/aiche/GSPS21/cfp.cgi

Abstract Descriptions:

Topic Description	Examples of topics
1. Committed Culture: Committed Culture is the outcome of dedicated and passionate involvement of the executives through the line managers to all the employees in improving the safety culture dimensions. In a Committed Culture, executives involve themselves personally, managers and supervisors drive excellent execution every day, and all employees maintain a sense of vigilance and vulnerability.	• *Explain with case study (Cultural surveys, analysis & results, reports, etc.) how your organisation have developed, strengthened and implemented process safety culture. Enumerate issues, difficulties faced by your organisation in implementing these practices.* • *Organisation's vision and future plans on improving process safety culture.* • *Process Safety Leadership & Engagement- How are you driving process safety culture within your organisation?* • *Process Safety culture in the post COVID-19* • *How employee engagement strategies can help create a resilient safety culture?*
2. Vibrant Management Systems Vibrant Management Systems are engrained throughout the organization. Vibrant systems readily adapt to the organization's varying operations and risks. For vibrant management systems to be effective, all employees must have a clear understanding of their role in managing process safety. The management systems promote inherently safer design principles and the principles of risk-based process safety. The word vibrant emphasizes that the management system must be flexible and adaptable to meet ever-changing needs and must work well with facilities of all sizes in the organization. Companies with great process safety performance do not impose the most complex systems on their facilities; instead, they require systems that are fit-for-purpose.	• *Challenges faced by your organisation in implementing and maintaining Process Safety management systems.* • *The use of process metrics and integrated management systems by your organisation in improving process safety* • *Enumerate how your organisation has (or will) implemented benchmarking process.* • *Conceptual Process Safety management system frameworks envisaged by your organisation for 2021 and beyond.* • *Case study on use of digital technology in transforming management systems.* • *Changes/Transformations done in your process safety management system to adopt the remote/virtual working model?*

Topic Description	Examples of topics
3. Disciplined Adherence to Standards Disciplined Adherence to Standards means using recognized design, operations, and maintenance standards. These standards are followed every-time, all the time, and are continually improved Disciplined adherence to standards starts by having a clear understanding of the standards that apply to various equipment and processes. With disciplined adherence, project managers either follow the endorsed standards or use an existing management system to gain approval from executives to modify the standards for a specific application.	• *Share existing process safety best practices, codes, standards implemented in your Organization.* • *Case study on How the use of standards promotes efficiency, reduces the potential for a major accident in your organisation?* • *Organizational best practices in disciplined adherence to standards leading to safe and reliable operations.* • *Challenges and best practices to maintain continuing compliance with standards throughout the equipment's lifecycle.* • *Issues/Challenges of assessing and managing the compliance of existing process plant equipment.*
4. Intentional Competency Development Intentional Competency Development ensures that all employees who impact process safety are fully capable of meeting the technical and behavioral requirements for their jobs. The bottom line: no matter how good the culture or management system is, or how well the company adheres to standards, it takes highly competent employees to implement those systems or standards. Companies with great process safety performance employ many forms of competency development, including continuing education, seminars and symposia in their field, mentoring, job rotation, and participation on industry committees.	• *Existing management practices for competency development at the unit level across operators, technicians through senior management and business executives to define requirements and identifying and addressing gaps if any.* • *Organizational vision for competency mapping.* • *Share best practices in - Competency development program and maximizing the 'Return on its' investment'- Measurement Metrics?* • *Managing process safety competency- Paradigm shift in methods and approaches? E.g. Classroom vs project based experience and acquired knowledge.* • *Challenges in sustaining process safety competencies.*

Topic Description	Examples of topics
5. <u>Big Data and Data Analytics in Process Safety:</u> Data generation & digitization is growing fast and can help to improve the safety of hazardous chemical operations. In this session, we will discuss the actual practices and opportunities-	• *Digital tools to help operators and technicians avoid incidents caused by human error;* • *Benefits of Data Lakes and Visualization to Safety;* • *Benefits to process safety of using Big Data Analytics;* • *Solutions with Augmented Reality to support plant operators, maintenance workers to avoid human errors;* • *Practical Big Data examples and successful projects that drive Process Safety through improving maintenance effectiveness;* • *Mobile leak detection, Inspection by drones, risky tasks performed by robots;* • *Early Identification of Process Safety and Hazard Risks, Intelligent Identification of Safety problems, solutions which reduce number and severity of incidents*
6. <u>Asset Integrity Management & Aging Facilities</u> The asset integrity element is the systematic implementation of activities, such as inspections and tests necessary to ensure that important equipment will be suitable for its intended application throughout its life. Specifically, work activities related to this element focus on (1) preventing a catastrophic release of a hazardous material or a sudden release of energy and (2) ensuring high availability (or dependability) of critical safety or utility systems that prevent or mitigate the effects of these types of events. In this session, we will discuss the actual practices and opportunities.	• *Programs or solutions implemented by companies to manage aging facilities* • *How companies are leveraging digital technologies for managing asset integrity, use of technologies such as drones* • *Experience sharing on 'Risk based inspections'.*

Topic Description	Examples of topics
7. <u>Security and Cyber Security in Process Industries</u> Chemical manufacturing relies on a number of Safety, Controls, Alarms, and Interlocks (SCAI) to manage process hazards. A cyber-attack can compromise one or more of these protection layers causing an incident while simultaneously defeating protective and mitigative measures. Cybersecurity issues related to the manufactured and deployed systems were not strongly considered until recently. In the context of Industry 4.0, where the systems and components are more and more connected to each other as well as to the Internet, cyber-attack routes have multiplied enormously. Cyber Security cannot be ignored anymore, considering the high risks and impacts associated with the SCAI systems as well as business continuity.	• *Key Security & Safety Challenges in Chemical Process Industry* • *Best practices for enhancing Safety & Security Performance in Chemical Industry* • *Understanding the Regulatory Landscape* • *Process safety and cyber security risk management convergence* • *Cyber Security risk management framework* • *Security and cyber security incident- Lessons Learned.*
8. <u>Process safety challenges during and post COVID-19</u> COVID-19 is one of the most significant challenges of our lifetimes, including the potential impacts on Risk-Based Process Safety performance of overall chemical industry. The industry has had to adapt to maintain a high degree of vigilance on process safety while providing additional controls for the safety of its workforce and facing unprecedented constraints.	• *Explain how COVID-19 changed their approach to PSM to address this pandemic?* • *How COVID-19 is being managed in your organizations, challenges they faced and solutions they successfully implemented* • *The future changes to the management of process safety that we might expect due to the lasting effects of COVID-19.* • *Good practices and process safety learnings gained so far during this unprecedented time.* • *How companies have managed various aspects related to Process Safety* *Like human performance, competency, digitization/Data management /remote technology, Mechanical Integrity/aging equipment, how to work effectively with fewer people in the plant.*

Topic Description	Examples of topics
9. <u>Enhanced Application and lessons learned</u> *Enhanced Application and sharing of lessons learned communicates critical knowledge in focused manner that satisfies the thirst for learning. Continuous learning comes from accidents, near misses, industry benchmarking, and success stories.*	• *Share the lessons learned from incidents and success stories in your organization.* • *Why am I reporting and investigating the incidents?* • *Role and application of digital solutions in enhanced application and sharing of lessons learned?* • *Case study- Elements of a traditional vs modern lessons learned program*