

2nd CCPS Canada Regional Meeting

Calgary, Alberta, 26 September 2017



26 September 2017

AGENDA

Time	Subject	Leader/Speaker
8:30 AM	Arrival – Breakfast	
9:00 AM	Safety Briefing	David Guss, Sr. Manager PSM, Nexen
9:05 AM	Roll Call (Self-Introduction)	All
9:15 AM	Welcome Note	Shakeel Kadri, Executive Director, CCPS
9:30 AM	CCPS Review 2017	Shakeel Kadri, Executive Director, CCPS
10:00 AM	<ul style="list-style-type: none"> CCPS Projects Update Opportunities of Participation 	Anil Gokhale, Director, CCPS Projects
10:30 AM	Coffee/Tea Break	
10:45 AM	Regional CCPS Projects – Engagement & Needs	David Guss/Fred Henslewood
11:15 AM	CCPS Membership Overview	Michele Horwitz, CCPS Membership Manager
11:30 AM	Credentialing	Shakeel Kadri/Anil Gokhale
11:45 AM	Undergraduate Process Safety Education	Shakeel Kadri/Anil Gokhale
12:00 PM	Lunch	
1:00 PM	Canadian PSM Standard CSA Z767	Guy Brouillard, GCM Consultants

26 September 2017

AGENDA

Time	Subject	Leader/Speaker
1:30 PM	PSM Metrics Workshop Presentations Max 20 Minutes Each <ol style="list-style-type: none"> 1. Nova PSM Metrics 2. Nexen PSM KPI's 3. CCPS / API PSM Metrics 	David Guss, Nexen <ol style="list-style-type: none"> 1. Fred Henslewood, Nova 2. Tom Guest, Nexen 3. Shakeel Kadri, CCPS
2:30 PM	Break	
2:45 PM	PSM Metrics Workshop – Group Discussion and Sharing	David Guss/Fred Henslewood/Shakeel Kadri
3:45 PM	Roundtable Discussion	Shakeel Kadri, Executive Director CCPS
4:15 PM	Incident Sharing & Lessons Learned	All
4:50 PM	<ul style="list-style-type: none"> • Closing Comments • Date & Location of Next Meeting 	Shakeel Kadri, Executive Director, CCPS
5:00 PM	Meeting Adjourned	

Presentation outline..

- Process Safety & Chemical Engineering
- The Harm We Bring to Many...
- About CCPS
- Our Global Effort
- CCPS Certification
- Undergraduate Process Safety Education
- Global Responsible Collaboration
- Process Safety Journey to Excellence
- Q&As

Chemical Engineering & Process Safety

- ❖ What good we bring to the many?
- ❖ What harm we bring to some?
- ❖ The harm all remember.....

What harm we bring to some that we may not remember?

Flixborough, UK, 1974



“The Global Community Committed to Process Safety”

What harm we bring to some that we may not remember?

Seveso, Italy, 1976



“The Global Community Committed to Process Safety”

What harm we bring to some that we may not remember?

Piper Alpha, UK 1988

**167
fatalities**



“The Global Community Committed to Process Safety”

What harm we bring to some that we may not remember?

Pasadena, TX, 1989



“The Global Community Committed to Process Safety”

What harm we bring to some that we may not remember?

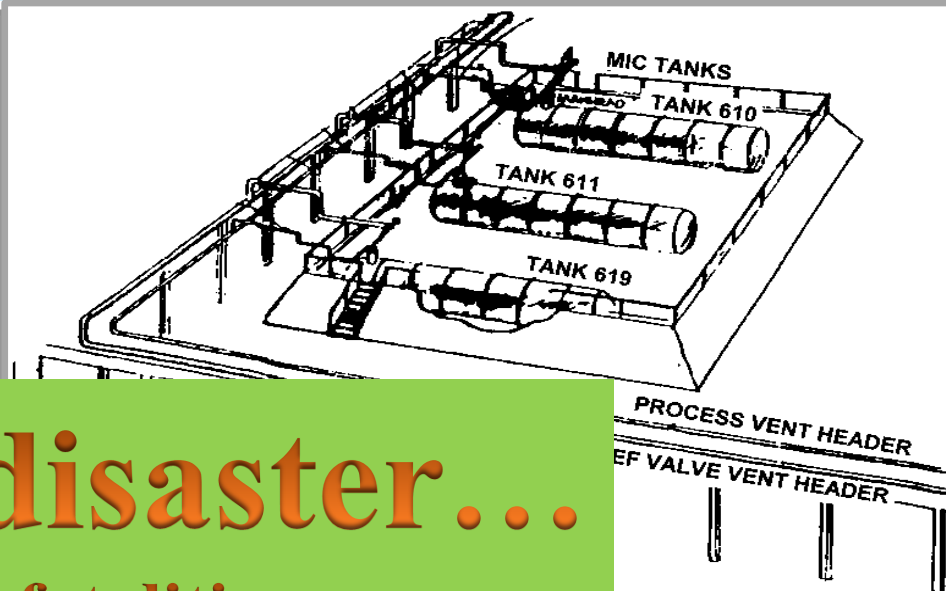
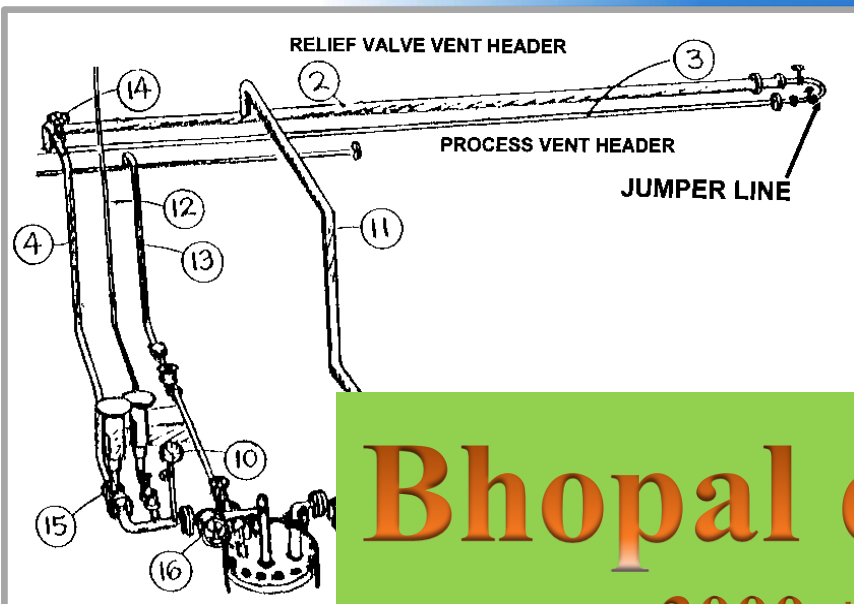
Mexico City, 1984

600+
fatalities



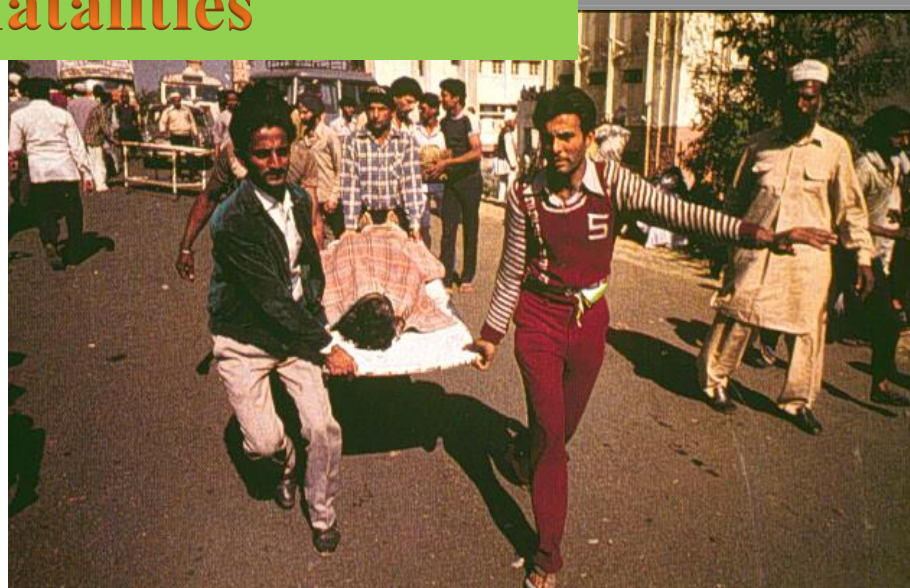
“The Global Community Committed to Process Safety”

The harm we all remember...



Bhopal disaster...

3000 + fatalities



Bhopal -- Lessons Learned

- Bhopal is the worst process safety incident that's ever occurred in the chemical industry
- It heightened focus on worst case events and how they are managed
- It became a catalyst for a safety reform
- It has lead to improved process safety practices worldwide
- Global process safety improvement initiated
- AIChE was asked to create a Safety Center --- [Center of Chemical Process Safety \[CCPS\]](#) – to lead a collaborative effort to eliminate catastrophic process incidents

About CCPS

- Formed on 23 March 1985
- Not for profit organization; part of AIChE
- Corporate supported – nearly 200 members
- Global scope and mission; 40% of members outside of USA
- Focus: preventing process incidents: fires, explosions, and toxic releases
- Petroleum production, refining, chemicals, pharma, chemical users
- Headquarters in New York City, with offices in Frankfurt, Mumbai, Singapore, Ningbo [China] and Houston.

“The Global Community Committed to Process Safety”

CCPS Vision



**“To protect people, property and the environment
by bringing the best process safety knowledge and
practices to industry, academia, the governments and the
public around the world through collective wisdom,
tools, training and expertise.”**

“The Global Community Committed to Process Safety”

CCPS Mission

Eliminate catastrophic process incidents globally by:

- Advancing global PS technologies, culture, and management practices
- Establishing Process Safety as foundation for responsible operation
- Serving as premier worldwide resource of Process Safety
- Fostering knowledge and understanding of Process Safety
- Promoting Process Safety as key societal value and expectation

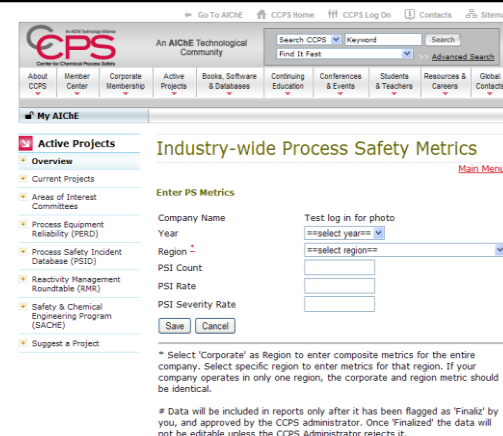
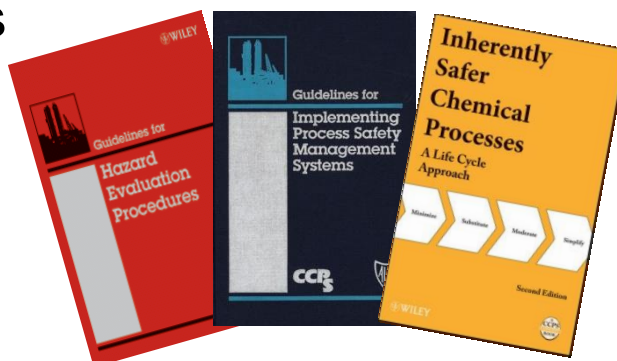
Leading Process Safety since 1985

CCPS Certified
CCPSC

Creating Books
 and Publications

Creating Industry-wide
 Tools, Programs and
 Guidelines

Sharing Best Practices



Process
 Safety
 Beacon



Conducting Global Conferences
 and Training

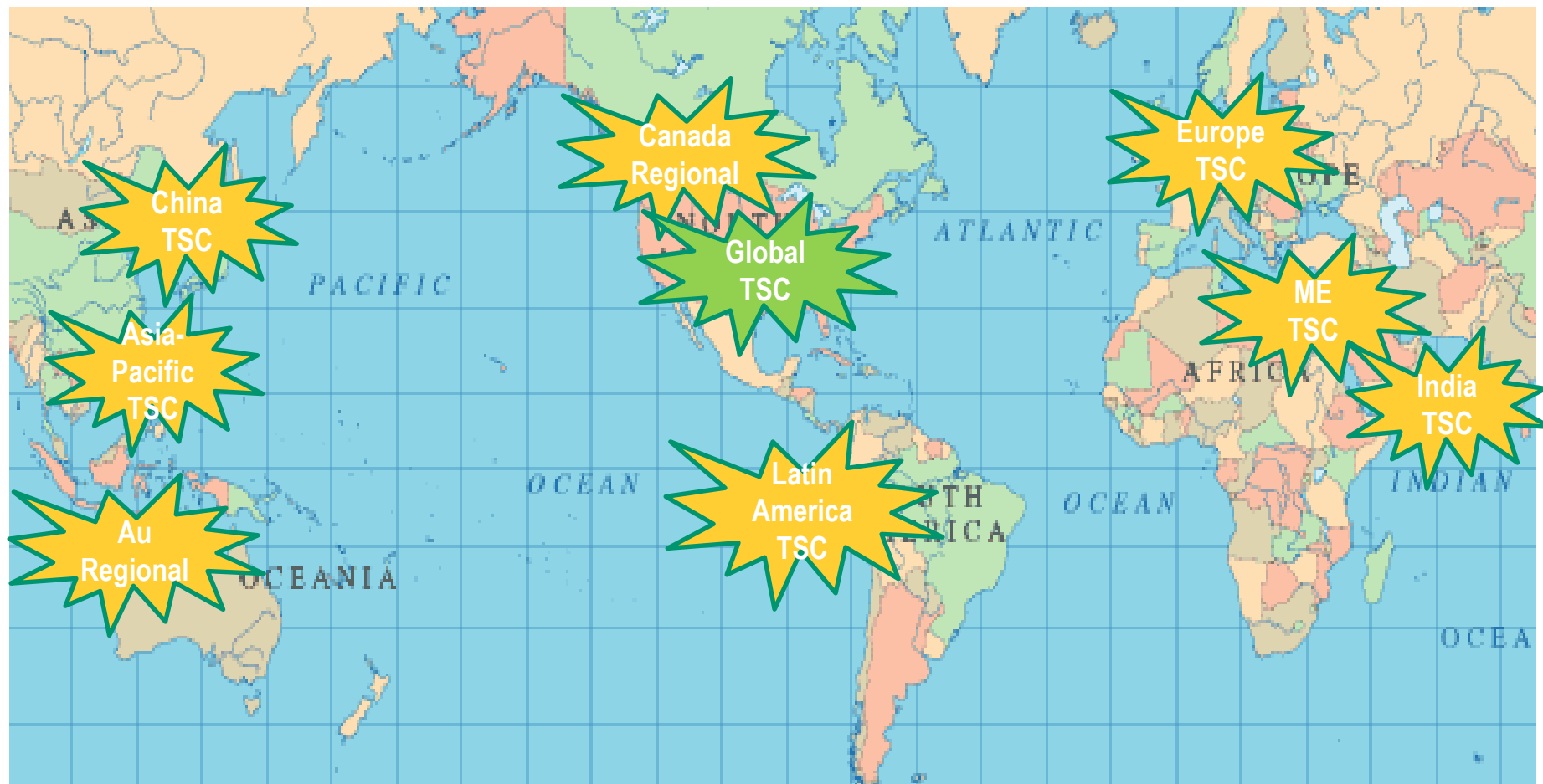
Educating Educators



"The Global Community Committed to Process Safety"

More Regional Engagement...

Technical Steering Committee Meetings



2017 Progress / Plan

2017 CCPS Progress / Plan [1]

- Added 19 new members during the Jan-Sept 2017 period
- Undergraduate Process Safety Education Program progressing well:
 - 10 New SACHE modules will be done
 - 5 + translations are in progress
 - 5 Faculty Workshop completed; including 1 is in India
 - 119 faculty members participated at these workshops
 - 2 Students Boot Camps completed
- Grow CCPSC globally
 - 2 exams completed in May & Aug 2017; 46 took CCPSC exam
- Expand Vision 20/20 – RBPS Web Tool, Risk Not Chance videos
 - 3 videos are in progress

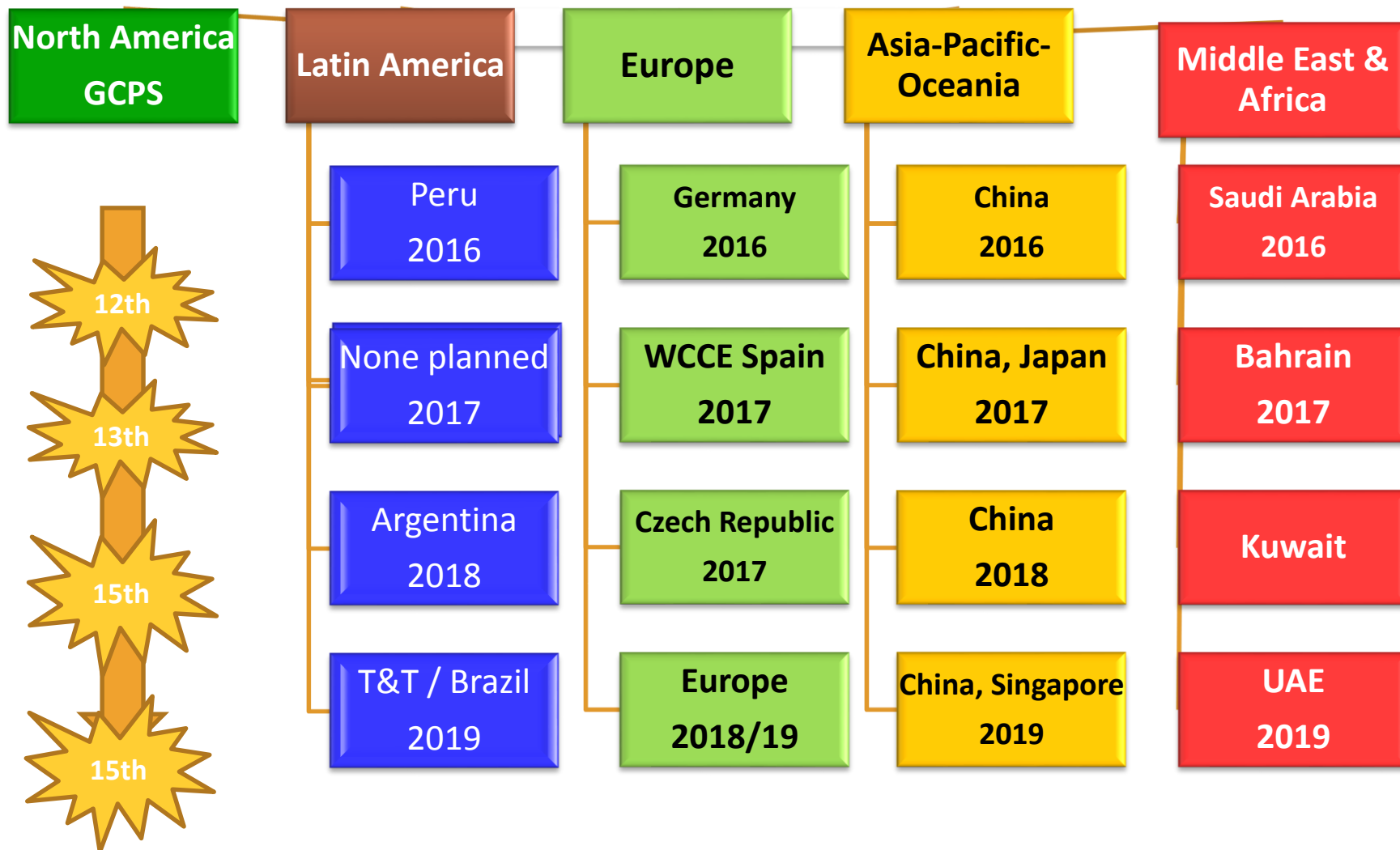
2017 CCPS Progress / Plan [3]

- Executing key conferences / workshops around the world
 - 13th Global Congress in Process Safety held in San Antonio, TX
 - CCPS PSM Congress with EUROCORR held in Prague, Czech Republic
 - 4th CCPS Global Summit held in Okayama, Japan
 - 5th China Conference, Nanjing, China
 - PS Workshop in Seoul, S. Korea [Louisa Nara and Umesh Dhake]
 - PS Workshops held in Latin America [Louisa and Orlando]
- Planned key conferences / workshops around the world
 - 2017 CCPS Middle East Process Safety Conference, 9-11 October 2017, Bahrain
 - Joint [CCPS, IChemE, EPSC, MKO, and WPLP] PSM Symposium at 10th World Congress of Chemical Engineering, Barcelona, Spain, 2-3 Oct 2017
 - 2nd CCPS Conference in Europe on PS + Big Data, 14-15 Nov 2017, Frankfurt, Germany
 - 1st API-754 Process safety Metrics workshop by Kelly Keim and Shakeel Kadri, 27 November 2017 in Kuwait

2017 CCPS Plan [2]

- **CCPS Membership:**
 - As of June 2017, we added 19 new members
 - 52% North America [NA]
 - 48% outside NA
- **Face to face Regional TSC meetings in all regions**
 - Europe [March 2017] – Done
 - Asia Pacific [May 2017] – Done
 - Australia [May 2017] – Done
 - Latin America [March-May 2017] – Done
 - China [22 September 2017] – Done
 - Calgary, Canada [26 September 2017] – Done
 - India [20 Dec 2017] – Planned

Global / Regional Engagement...





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13th Global Congress on Process Safety



13th Global Congress on Process Safety

📅 March 26-29, 2017

📍 **Henry B. Gonzalez Convention Center, San Antonio, TX**

Each year the Center for Chemical Process Safety (CCPS) and the AIChE Safety & Health Division present the Global Congress on Process Safety (GCPS). From its initial meeting in 2005, GCPS has grown into the world's largest gathering practitioners from industry, regulatory bodies and academia.

13th GCPS Grid

The 13th GCPS Pre-Conference Proceedings Have Been Posted.
[Click here to view →](#)

To obtain a copy of CEU/PDH certificate for the conference please email certificates@aiiche.org.

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4th CCPS Global Summit on Process Safety



4th CCPS Global Summit on Process Safety

September 12-13, 2017

Okayama Convention Center, Japan

Over the past several years Process Safety has taken on increased importance. Today companies large and small, in the traditional process industries and in emerging areas, all put a premium on improving their Process Safety performance.

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Check out the sessions being offered at the 4th GSPS below:

4TH CCPS
GLOBAL





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5th CCPS China Conference on Process Safety



5th CCPS China Conference on Process Safety

September 20-22, 2017

International Youth Convention Hotel, Nanjing, China

Presented by the Center for Chemical Process Safety (CCPS), State Administration of Work Safety, China University of Petroleum, China Chemical Safety Association, and NCICS. This conference aims to bring together professionals, government, and academics in China and Internationally to share advancements in process safety. The conference will be conducted via English and Chinese with simultaneous translation.

Conference Program



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2017 Process Safety Congress at EUROCORR



2017 Process Safety Congress at EUROCORR

September 5-6, 2017

Prague Congress Centre, Prague, Czech Republic

CCPS is pleased to announce that it will be holding the 2017 Process Safety Congress in conjunction with the 2017 EUROCORR and 20th International Corrosion Congress in Prague, Czech Republic. The 2017 Process Safety Congress will take place during the conference, September 5-6, 2017.

Registration

Hotel Information

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40

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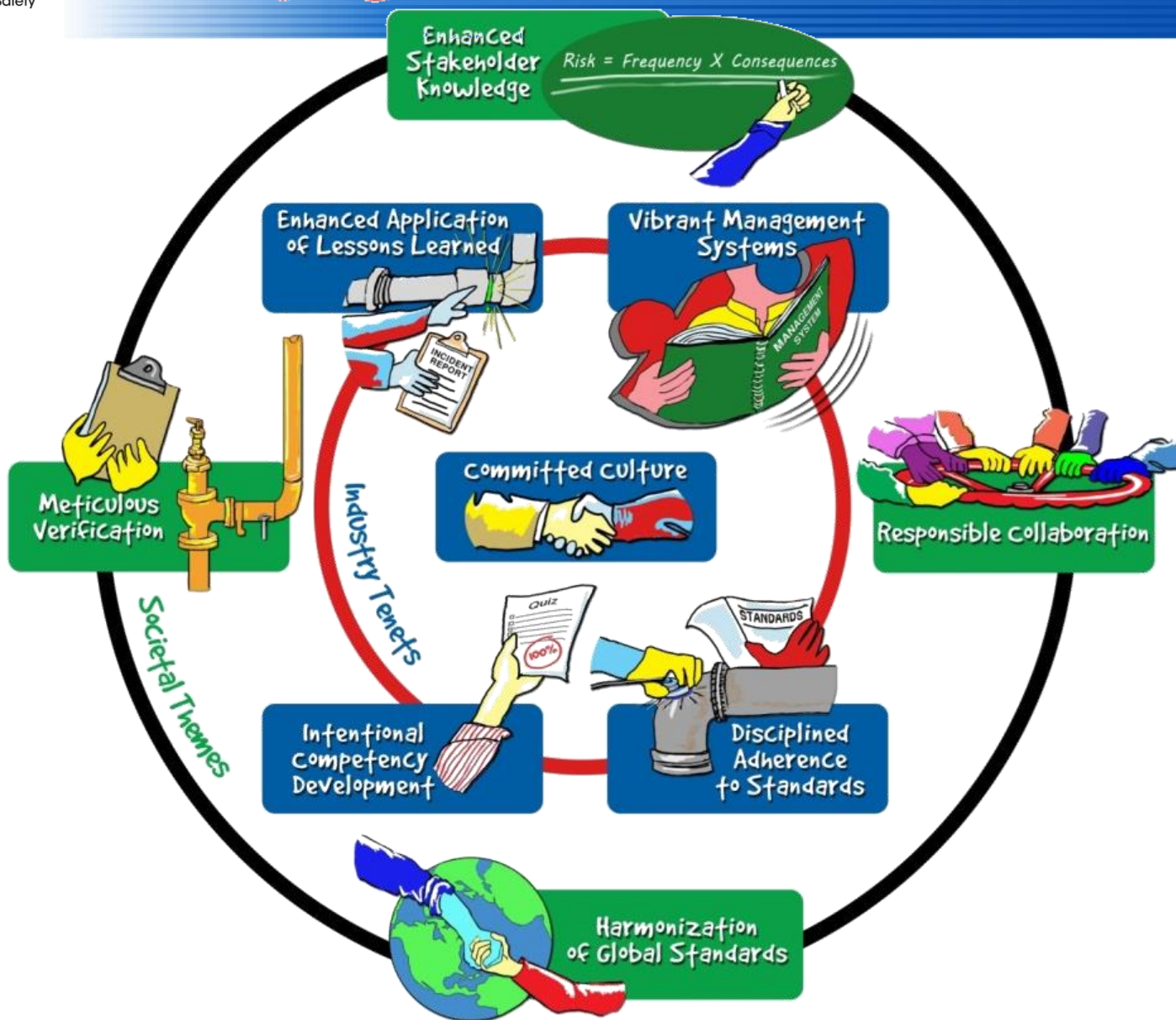
+

Technical Program

Quick Links

The 2017 Process Safety Congress will be organized by CCPS and its volunteers from

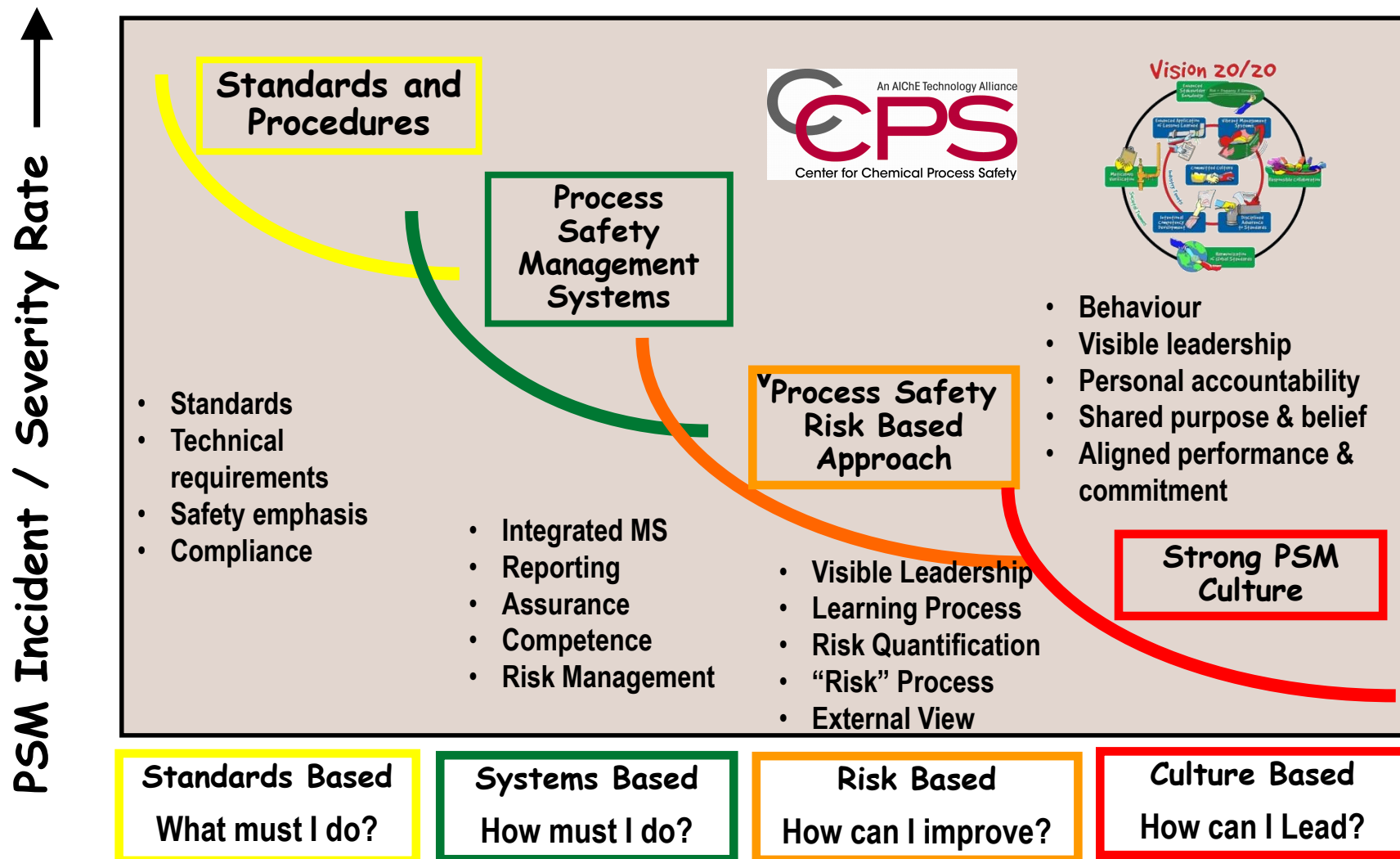
Vision 20/20



Responsible Collaboration

Organization	Collaborating activity
Energy Institute [EI]	Bow Tie Guideline Book
Society of Petroleum Engineers [SPE]	Process Safety for Upstream Guideline Book
American Chemical Council [ACC]	Enhancing Process Safety effort
Japan Society for Safety Engineering [JSSE]	4 th Global Summit, Okayama, Japan
European Process Safety Center [EPSC]	Europe PS + Big Data Conference, Frankfurt
EPSC + Dow Chemicals	RAST [Risk Analysis Screening Tool]
ICHEME, MKO, EPSC and WPLP	2017 WCCE-10 Barcelona PSM Track
Singapore Chemical Industry Council	MOU signed; 6 th Global Summit [2019]
PERTAMINA University [Indonesia]	MOU signed
Universiti Teknologi Petronas [UTP] University [Malaysia]	2 nd Global Summit
OSHA	CCPS Risk Based Process Safety elements as best practices reference on the OSHA Web Tool
Chemical Safety Board [CSB]	Potential CCPS-CSB collaboration on developing video modules using CCPS content

Process Safety Journey to Excellence



Questions?