	SUNDAY, April 26						
8:00 AM – 5:00 PM	GCPS Short Courses						
6:30 PM – 8:00 PM	2015 AIChE Spring Meeting and 11 th GCPS Opening Reception Location: Conv. Ctr. Exhibit Hall 5						
	MONDAY, April 27						
7:00 AM	Complimentary Breakfast Location: Conv. Ctr. Ballroom D						
8:00 AM	2015 AIChE Spring Meeting and 11 th GCPS Opening Plenary Session: Cheryl Teich , AIChE President and June C. Wispelwey , AIChE Executive Director Location: Conv. Ctr. Ballroom D						
8:30 AM	Keynote Address: Chemical Engineering – Is this the "Golden Age"? Presented by Marvin O. Schlanger, Chairman of the Supervisory Board of LyondellBasell (Ret.) Location: Conv. Ctr. Ballroom D						
9:15 AM	Coffee Break Location: Conv. Ctr. Exhibit Hall 5						
	11 th GCPS Welcoming Plenary Session Location: Conv. Ctr. Ballroom D 11th GCPS Introduction and Welcome: Shakeel Kadri (Executive Director, CCPS) and Rainer Hoff (GCPS Chair)						
9:40 AM	Programming Introductions by: Charles A. Soczek, 49th Annual Loss Prevention Symposium (LPS) Chair Samantha Scruggs, 30th Center for Chemical Process Safety (CCPS) International Conference Chair Karen Study, 17th Process Plant Safety Symposium (PPSS) Chair Lisa Long, 4th Process Safety Management Mentoring (PSM2) Chair Laura Turci, Perspectives on Process Safety from Around the World Chair Jatin Shah, Process Safety Spotlights Chair J. Wayne Chastain, Design Institute for Emergency Relief Systems (DIERS) Symposium Chair						
	Presentation of William H. Doyle Award for LPS Best Paper Award and PPSS Best Paper Award						

			MONDAY	, April 27			
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Perspectives on Process Safety from Around the World	Design Institute for Emergency Relief Systems (DIERS)
	Executive Panel: Opportunity Crudes in a Changing Market and Process Safety Considerations	Guidelines for Effective Implementation of PSM I	Committed Culture I	Technological Advances and Their Impact on Process Safety	Fires and Explosions I	Challenges of Japan's Process Safety	Effective Scenario Identification for Pressure Relief and Effluent Handling Systems
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Room 18D	Location: Conv. Ctr. Ballroom F
	Co-Chairs: Tim Olsen Jatin Shah	Co-Chairs: Bruce K. Vaughen Sunil Lakhiani	Co-Chairs: Jim Klein Seshu Dharmayaram	Co-Chairs: Sanjeev Saraf Vic Edwards	Co-Chairs: Jerome Taveau Derek Miller	Co-Chairs: Masaki Nakagawa Neil Concibido	Co-Chairs: Peter Howell, Wayne Chastain
10:30 AM	Panelists Include: Steve Arendt, ABSG Consulting, Inc. Carl Weaver, Baker Hughes	Development and Implementation of Process Safety and Integrity Management (PSIM) Frik Febby	OK so our culture sucks! What Do We Do Now? Mike Broadribb,	Eli Lilly PSM Implementation Case Study Robert Stankovich	Suppression of Overpressure during a Vapor Cloud Explosion Chris Buchwald	Development and Research Activities of Advanced System Safety Laboratory for Safety Education/Culture Atsuko Fumoto	Overpressure Protection of a Pressure Vessel By System Design through the Application of ASME VIII Ug-140 in Lieu of a Relief Device By an Appropriate Choice of Mawp and/or By Safety Instrumented System Dilip K. Das
11:00 AM	Michael E. Webber, UT Austin Steve Graybill Downstream Advisors, Inc	How Maintaining Current Heat & Material Balances Commits to Process Safety Nicholas Cristea	Leading Indicators: The Corner Stone of a Committed Process Safety Culture Anne O'Neal	Autonomous Remote Gas Detection Using Optical Imaging Technology Jonathan Morris	Deflagration Load Generator: Repeatability and Application to Test Article Blast Loading Brad Horn	Development of Quantitative Hazard Analysis Method for Inherently Safer Chemical Processes Yuto Mizuta	Understanding Gas Blowby Scenario Calculations Nancy Faulk
11:30 AM		Common Capital Project Flaws that Cause Failure of Process Safety Objectives Denise Chastain-Knight	Essential Practices for Developing, Strengthening, and Implementing Process Safety Culture David Moore	An Optimal Cost- Effective Approach to Sensor Siting for Industrial Facilities Azar Shahraz	On the Use of Laminar Burning Velocities in Process Safety Alfonso F. Ibarreta	Challenge of Mitsubishi Chemical's Process Safety Masaki Nakagawa	Can I Use My Cooling Water Header As a Relief Device? Rahul Raman
12:00 PM		Luncheon with Sp	beaker: Wesley E. L Location: Hil	ohec – "Challenges ton, Sixth Floor, Salo		ve process safety"	

			MONDAY, Apr	ril 27			
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Design Institute for Emergency Relief Systems (DIERS)	
	Process Safety in LNG and LPG I	Guidelines for Effective Implementation of PSM II	Committed Culture II	What You Need to Know about Process Safety for Capital Projects	Fires and Explosions II	Relief Considerations for Low Pressure Storage Tanks	
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Ballroom F	
	Co-Chairs: Trey Morrison, Kathy Pearson Victor Edwards	Co-Chairs: Ravi Ramasamy Kaitlin Keller	Co-Chairs: Jim Klein Seshu Dharmavaram	Co-Chairs: Katherine Prem Yan Chu	Co-Chairs: Jerome Taveau Derek Miller	Co-Chairs: Casey Houston Georges Melhem	
1:30 PM	CFD Modeling of Large Scale LNG Pool Fires Fillipo Gavelli	Implementing PSM: Perspective from a Process Engineer Turned PSM Attorney D.A. Duggar	Creating a Culture of Chronic Unease Laurence Pearlman	Real World Challenges in Meeting Risk Criteria for Brownfield Projects Anne Branson	Hydrogen Jet Vapor Cloud Explosion: Test Data and Comparison with Predictions J. Kelly Thomas	Influence of Overpressure in Pressure Vacuum Safety Valves on Emission Reduction and Explosion Risk Minimization of Atmospheric Storage Tanks Davide Moncalvo	
2:00 PM	CFD Modeling of LNG Spreading and Atmospheric Dispersion Anh Bui	Living the Process Safety from Instrumentation and Control Projects, a Successful Case John Rueda	Guidelines for Creating a Process Safety Culture Assessment Tool Sunil Lakhiani	Pre-Developing an Asset Integrity Program during the Capital Project F. Russ Davis	Prediction of the Mass Flow of Heavy Gas Released from Standard Gas Bottles Christian Rauchegger	A Comprehensive Guide to Accurately Size Pressure and Vacuum Relief Devices for Atmospheric and Low Pressure Storage Tanks Steve Streblow	
2:30 PM	Mitigation Effect of High Expansion Foam on LNG Vapor Hazard Bin Zhang	Implementation of Process Hazard Analysis at SINOPEC-SABIC Tianjin Petrochemical Company Ltd, China Homoud Al-Maynouni	Cracking the Code of Process Safety Culture with Organizational Network Analysis Elliot Wolf	Prevention or Mitigation of Major Accident Hazards through Early Identification of Safety Critical Elements Raminaidu Girada	Engineered Floating Beads: New Method for Vapor Suppression and Fire Prevention for Flammable Liquids Joe Riordan	Overfilling Protection for Weak Tanks Rahul Raman	
3:00 PM	Coffee and Networking Break Location: Conv. Ctr. Exhibit Hall 5						

	Process Safety in LNG and LPG II	Careers in PSM – Invited Panel	Vibrant Management Systems	LOPA and the Process Safety Lifecycle	Fires and Explosions III	Historia De Casos y Lecciones Aprendidas	Effectively Deal with Evolving Codes, Standards, and RAGAGEP for Pressure Relief Systems		
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Room 18D	Location: Conv. Ctr. Ballroom F		
	Co-Chairs: Trey Morrison Kathy Pearson Victor Edwards	Co-Chairs: Jeff Fox Dow Corning	Co-Chairs: Russ Ogle Bernard Groce	Co-Chairs: Christy Blanchard Kimberly Mullins	Co-Chairs: Jerome Taveau Derek Miller	Co-Chairs: Nestor Sposito Luisa Lopez	Co-Chairs: Warren Greenfield Wayne Chastain		
3:30 PM	The Human Factors behind Inherently Safer Design of LNG Liquefaction Terminals David Weimer	Panelists includes: Carlos Barrera – Exponent Scott Berger – CCPS	Recent Process Safety Developments at BASF Ludwigshafen, the World's Biggest Chemical Site Hans Volkmar Schwarz	Impacts of Process Safety Time on Layer of Protection Analysis Geoffrey Barnard	Risk Ranking Criteria for Catastrophic Vessel Failures Due to Fire Exposure. Vessel Wall Dynamics & Consequence Analysis Jordi Dunjó	Un Caso Real En Ocotlan, México: Aplicación De análisis De Causa Raíz y Acciones En Base a Pareto Hugo Hernadez	Changes Between API STD 521 6th Ed and 5th Ed Cataloged Dustin J. Smith		
4:00 PM	The Hazard We Know: Comparing Transportation Risk of LPG and LNG Ryan J. Hart	Cheryl Grounds – BP Karen Tancredi – Chevron Kendall Werts – Linde Process Plants	Next Generation Root Cause Investigation and Analysis - Elimination of Repetitive Incidents through Strengthening Management Systems Kenan Stevick	Demonstrating Separation and Independence of Automated Systems Angela. E. Summers	Observations and Modeling of Off-Site Damage from Large Vapor Cloud Explosion (VCE) Events Raymond H. Bennett	Indicadores De Seguridad De Procesos y Observaciones Planificadas De Seguridad Ricardo Ceskiavikus	Changes Between API STD 520 Part II 6th Ed and 5th Ed Cataloged John Burgess		
4:30 PM	Experimental Study on Propane Jet Fire Hazards: Thermal Radiation Bin Zhang		Do Ugly Ducklings Become Black Swans? John Herber	LOPA - More Observations from the Originators William Bridges & Art Dowell	Risk Assessment for a Gas and Liquid Hydrogen Fueling Station Jo Nakayama	Incidentes Ocurridos En La Industria Del Gnl Juan G. Haitzaguerre	Evolution of Relief Sizing at an Operating Company Michael J. Maness		
5:00 PM		GCPS Electronic and Paper Poster Session and Cocktail Reception, Co-Chairs: Peter Lodal, Jennifer Mize, Jack Chosnek							

Co-Chairs: Peter Lodal, Jennifer Mize, Jack Chosnek Location: Conv. Ctr. Exhibit Hall 5

			TUESDAY	, APRIL 28			
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Perspectives on Process Safety from Around the World	Design Institute for Emergency Relief Systems (DIERS)
	Human Factors I	The Day PSM Hit Home I	Responsible Collaboration	Process Safety Management Audits	Combustible Dusts Hazards	Latest Developments in Process Safety in China I	Initial Design and Managing Ongoing Operation of Pressure Relief Systems
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Room 18D	Location: Conv. Ctr. Ballroom F
	Co-Chairs: Tim Murphy Amanda Chapman	Co-Chairs: Michael Morris Scott Haney	Co-Chairs: Jerry Forest John Wincek	Co-Chairs: Jim Thompson Robert Stankovich	Co-Chairs: Michael Moosemiller Henry L. Febo	Co-Chairs: Dongfeng Zhao Yi Liu Meng Yi-fei	Co-Chairs: Daniel Nguyen Wayne Chastain
8:00 AM	The Psychology of Decision Making in Process Hazard Analysis Paul Baybutt	We Learn and Share but We Don't Get Better! Time for Huaa Mike Bearrow	The Evolution of Process Safety Standards and Legislation Following Landmark Events - What Have We Learnt? Trish Kerin	API Process Safety Site Assessment Program - Promoting a Culture of Process Safety Andrew Broadbent	A Theoretical-Based and Generalized Method for Dust and Gaseous Deflagration Vent Sizing Hans K. Fauske	Safety Management of Petrochemical Tank Farms Dongfeng Zhao	Overlooked Factors in Pressure Relief Systems Design Corey Heitzman
8:30 AM	Advanced Procedure Research Study - Applying Human Factor Principles to Procedure Presentation and Design Elliott Lander & Camille Peres	Young, Inexperienced, and Learning: How Process Safety Hit Home While Attending a Conference Ashley M. Weckwerth	Industrial Partnerships and PSM Standards in Canada Adrian Pierorazio	Process Safety Auditing: Thinking Beyond Compliance Stephen Gill	Combustion and Explosion Related Properties of Carbon Nanofibers Jiaqi Zhang	Study on Separation Distance Determination of LNG Filling Station on Water Gujun Wan	Will It Really Make That Much of a Difference? Broad Effects of Operational Changes on Relief System Design Marie Baker &Teddy Bucher
9:00 AM	Examination of Events That Occur during an Alarm Flood - Their Impact on Safety and Proper Corrective Action Dustin Beebe	The Road Between Reality and Philosophy (aka HSE Success within an Engineering Organization) Rao Akula	AIChE/CCPS White Paper: Recommendations for Establishing Process Safety Investigation Boards Scott Berger	Ignorance Is No DefenseAudit Management Best Practices Mike Bearrow	Unconfined Deflagration Testing for the Assessment of Combustible Dust Flash Fire Hazards Michael C. Stern	A Case-Study of a Fire Incident of Trichlorosilane Process and Response Measures Jao-Jia Horng	Auditing Relief Systems Design Basis - Best Practices Neil Prophet
9:30 AM				ee and Networking Boon: Conv. Ctr. Exhibit			

	Human Factors II	The Day PSM Hit Home II	Disciplined Adherence to and Harmonization of Standards	Best Practices in Process Safety and Risk Management I	Facility Siting Consequence Analysis I	Latest Developments in Process Safety in China II	Development of Engineering Analysis Methods and Tools for Pressure Relief Valve Stability and Relief Pipe Reaction Forces
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Room 18D	Location: Conv. Ctr. Ballroom F
	Co-Chairs: Tim Murphy Amanda Chapman	Co-Chairs: Alan C. Brackey Brenton L. Cox	Co-Chairs: Marty Timm John Herber	Co-Chairs: Sandipan Laskar Mervyn Carneiro	Co-Chairs: Ronald J. Willey Jean-Paul Lacoursiere	Co-Chairs: Dongfeng Zhao Yi Liu Meng Yi Fei	Co-Chairs: Marc Levin, Georges Melhem
10:15 AM	Procedural Safeguard Reliability Sean J. Dee	2007 Valero McKee Refinery Fire Shannon Gillespie	How Does "Deviation" Become "Normal"? Jennifer Mize	Using PHA As a Framework for Effectively Addressing Evolving PSM/RMP Guidelines, Such As Damage Mechanism Hazard Reviews Steven T. Maher	Modelling Liquid Fuel Cascades with Open Foam Jennifer X. Wen	Case Analysis of Oil and gas Pipeline Deflagration Accidents Shi Li	Dynamics of Direct Spring Operated Prv's with Inlet Piping in Gas Service Kenneth Paul & Alan Champneys & Csaba Hos
10:45 AM	Changing Demographics: Preserving Safety and Increasing Performance Denise Brooks	1987 Celanese Pampa Butane Vapor Cloud Explosion Jack Mc Cavit	The Changing Tide of US Process Safety/Risk Management Regulations - How CCPS Risk Based Process Safety and Vision 20/20 Concepts Can Harmonize Future Requirements Steve Hawkins	A Case Study to Show How Bow-Tie Analysis Can be Used As an Effective Communication Tool in Risk Assessments Varsha Pedhireddy	Consequence Modeling of Dynamic Source Terms Michael D. James	Research of Process Safety Management Platform Architecture Based on Internet of Things Guoliang Yang	Effect of Body Bowl Choking on Pressure Relief Valve Stability Hisao Izuchi
11:15 AM	Human and Organizational Factors Assessment and Their Use As Potential Safety Barriers Mehmood Ahmad	"Let Me Tell You" The impact of Eastman's Aniline Plant Explosion on Process Safety Awareness Pete Lodal	PSM/RMP Modernization Programs in California - Current Initiatives and What's on the Horizon Steven Maher	The Lifecycle of a Process Safety Recommendation Andrew Staszak	Toxicity-Hazard Index and the "Infinite Point" Richard Prugh	Application and Optimization of Quantitative RBI on Equipment of Station Yard Shuang Liang	Modeling and Computation of Reaction Forces on Relief Piping during Depressurization Jens Conzen & Gabe Wood
11:45 AM		Luncheon with		Sadri – Process Safe ton, Sixth Floor, Sale		anizational view	

			Tuesday, Apri	1 28				
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Design Institute for Emergency Relief Systems (DIERS)		
	Process Safety in Upstream Operations I	PSM Mastery I - Specific examples of the four pillars of risk based process safety	Enhanced Application of Lessons Learned	Best Practices in Process Safety and Risk Management II	Facility Siting Consequence Analysis II	How to Measure the Right Data for Reaction Systems		
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Ballroom F		
	Co-Chairs: Cheryl Grounds Robert Benedetti	Co-Chairs: Brian Dickson Ruifeng "Ray" Qi	Co-Chairs: Andrew Goddard Swati Umbrajkar	Co-Chairs: Sandipan Laskar Mervyn Carneiro	Co-Chairs: Ronald J. Willey Jean- Paul Lacoursiere	Co-Chairs: Peter Ralbovsky Wayne Chastain		
1:30 PM	Safety Case VS SEMS: Are They Really All That Different? an Operator's Perspective Chris Israni	Sherlock Holmes, Why Trees, Bow Ties, and Investigating Process Incidents, James Klein	Dow Learnings & Actions from the Deepwater Horizon Accident John Champion	Problems with HAZOPs and How to Correct Them Howard Duhon	Discharge and Dispersion for Large-Diameter CO2 Releases: Experimental Data and Data Review Henk Witlox	Phi Correction for Exothermic Gas Generation Rate Guibing Zhao		
2:00 PM	A Modern Well HAZOP Approach Yaneira Saud	Ten Commandments of Risk Based Process Safety Robert Rosen	Three Decades after Bhopal: What We Have Learned about Effectively Managing Process Safety Risks Bruce Vaughen	Good till the Last Drop – Acceptable Valve Leakage Rates Adam Cozat	Alternative Screening Level Models for the Siting of Structures Subject to Potential Blast Hazards Raymond. H. Bennett	Calorimetric Study of the Exothermic Decomposition of Dimethyl Sulfoxide B. Todd Brandes		
2:30 PM	To Safely Go Where No Man Has Gone before: Exploring and Producing with Process Safety Mike Broadribb	Developing Credible Scenarios for a PHA, Nestor Paraliticci	HUAAWhen Local Learning and Casual Sharing Is Not Enough Mike Bearrow	Improving Process Safety Performance James Klein	Calculating Facility Siting Study Leak Sizes - Applications of the Maximum Design Leak (MDL) Approach Gary A. Fitzgerald	Relief System Sizing for Runaway Chemical Reactions - a Simple Comprehensive Approach Charles Kozlowski		
3:00 PM		Coffee and Networking Break Location: Conv. Ctr. Exhibit Hall 5						

			Tuesday, April	28		
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Design Institute for Emergency Relief Systems (DIERS)
	Process Safety in Crude Oil Transportation	PSM Mastery II - Specific examples of the four pillars of risk based process safety	Intentional Competency Development	Getting the Most from Your Process Safety Near Misses I	Facility Siting and Consequence Analysis III	Practical Methods for Two Phase Flow Estimates
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Ballroom F
	Co-Chairs: Dan Miller Bernard Groce	Co-Chairs: Nicholas N. Cristea, Faraz Khan, Siemens	Co-Chairs: Lizbeth Cisneros Don Connolley	Co-Chairs: John Champion Colin (Chip) Howat III	Co-Chairs: Ronald J. Willey Jean-Paul Lacoursiere	Co-Chairs: Davide Moncalvo Georges Melhem
3:30 PM	Human Factors Considerations: Midstream Process Safety Integration Denise Brooks	PHA Facilitation and Teamwork Dynamics: Or Why Not All Hazops Are Created Equal Carlos Barrera	Know Your Target Audience - Building Leader Competency in Process Safety Joan Bruney	Are We Really Learning from Incidents? a Discussion of Best Practices and Common Mistakes Laurence Pearlman	An Optimization Formulation for Risk Reduction of the Layout of Offshore Platforms Joshua Richardson	Choked and Near- Choked Real Gas and Two-Phase Flow Analysis of Discharge Piping Leonid Korelshteyn
4:00 PM	Overcoming the Process Safety Challenges in Midstream Pipeline Operations Juan E. Contreras	Assimilating Design Formulation and Design Review into a HAZOP - Lessons Learned and Additional Tips Steven T. Maher	Bridging Hazard Recognition Knowledge and Competency for Process and Occupational Safety Michael Fleming	Praxair's Process Safety Metric Program and Use if Large Data Dan Rathgeber	Blast Resistant Design and Retrofit of Buildings at Petrochemical Facilities Paul Summers	Models for Multi-Phase & Single-Phase Flow in Pressure Relieving System Using Bernoulli Integration Freeman Self
4:30 PM	Hazardous Material Transportation Perceived Risks & Risk Management Brad A. Fuller	Surviving an OSHA PSM National Emphasis Program Audit James Johnstone	Making Sense of Reason: A Review of the Message James Reason Put Forward for a Re-Think of Safety Management Principles Brian Dickson	Systematic Approach to the Root Cause of Process Safety Events at Equion Energia Ltd Ignacio Alonso	Thermal Radiation Analysis from Large Pool Fires in an Existing Atmospheric Storage TANK Farm to Estimate the Maximum FIRE Water Demand Marco-Antonio Medrano	How to Size a Rupture Disk Vent Line for Two- Phase Gas/Liquid Flow Based on Current Engineering Practices Juergen Schmidt

			Wednesday, Ap	oril 29				
	Process Safety Spotlights	4 th Process Safety Management Mentoring (PSM ²)	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Design Institute for Emergency Relief Systems (DIERS)		
	Big Data Analytics Panel I	Guidelines for Effective Implementation of PSM III	Enhanced Stakeholder Knowledge	Application of Risk Analysis I	Process Safety in Upstream Operations II	New Developments in Fire Exposure and Depressuring Systems Design and Evaluation		
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Ballroom F		
	Co-Chairs: Jatin Shah Eric Peterson Leo Chiang	Co-Chairs: Brenton L. Cox Kaitlin Keller	Co-Chairs: Brad Newman Ryan Hart	Co-Chairs: Phil M. Myers Mike Broadribb	Co-Chairs: Cheryl Grounds Robert Benedetti	Co-Chairs: Michael Maness, Georges Melhem		
8:00 AM	Panelists Include:	CSB Recommendations for PSM Reform Mark Griffon	Mary Kay O'Connor Process Safety Center: A Catalyst for Enhanced Process Safety Competency and Knowledge Sam Mannan	Dependent, Independent and Pseudo-Independent Protection Layers in Risk Analysis Hui Jin	CFD Analysis and Field Tests of Gaseous Leaks with 80% CO2 on Offshore Facilities Jianxin Lu	Modification of the Diers Fire Exposure Test Methodology Peter J. Ralbovsky IV		
8:30 AM	Ted Wasserman, Tableau Software Lyold F. Colegrove, The Dow Chemical Company Deborah Grubbe, Operations and Safety Solutions, LLC Michael Firstenberg, Waterfull Sounity	Improving Risk-Based Decision Making By Connecting PSM Systems to Day-to-Day Plant Operations Mike Neill	Advancing the Imperative for Process Safety Education in Engineering Curricula Gord Winkel	The Societal Risk of Process Industry Based on Integrated Assessment of Quantitative Risk Analysis (QRA) and Risk-Based Inspection (RBI) Methodologies Vincius Esteves	Case Study: Laser-Based Gas Detection Technology and Dispersion Modeling Used to Eliminate False Alarms and Improve Safety Performance on Terra Nova FPSO Rajat Barua	Guidance for Sizing Relief Devices That Are Installed below Liquid Level in an External Fire Rahul Raman		
9:00 AM	Waterfall Security Solutions	Risk Doesn't Equal Frequency Times Severity Fred Henselwood	Dow Laboratory Safety Academy Promotes Safety Mindset in Future Chemical Workforce Marabeth Holsinger	Addressing Issues in the Design and Use of Risk Matrices in Process Safety Paul Baybutt	Escape Routes Selection for Offshore Units Based on Quantitative Risk Assessment Results Mariana B. Bardy	Mechanical Integrity Considerations in LNG Depressurization Daniel Nguyen		
9:30 AM		Coffee and Networking Break Location: Conv. Ctr. Exhibit Hall 5						

	Process Safety Spotlights	17 th Process Plant Safety Symposium (PPSS) Track II	30 th Center for Chemical Process Safety International Conference (CCPS)	17 th Process Plant Safety Symposium (PPSS)	49 th Annual Loss Prevention Symposium (LPS)	Design Institute for Emergency Relief Systems (DIERS)
	Big Data Analytics Panel II	Getting the Most from Your Process Safety Near Misses II	CCPS Featured Projects – Vision 20/20	Application of Risk Analysis II	Reactive Chemicals	Unique Aspects of Pressure Relief Systems Design and Evaluation for Reaction and Flare Systems
	Location: Conv. Ctr. Ballroom E	Location: Conv. Ctr. Ballroom G	Location: Conv. Ctr. Room 18B&C	Location: Conv. Ctr. Room 17A&B	Location: Conv. Ctr. Room 19A&B	Location: Conv. Ctr. Ballroom F
	Co-Chairs: Jatin Shah Eric Peterson Leo Chiang	Co-Chairs: John Champion Colin (Chip) Howat III	Co-Chairs: Jeff Fox Eric Freiburger	Co-Chairs: Phil M. Myers Mike Broadribb	Co-Chairs: Kathleen A. Kas John F. Murphy	Co-Chairs: Ken Kurko Wayne Chastain
10:15 AM	Panelists Include: Ted Wasserman, Tableau Software	Process Safety Opportunities for the Refining and Petrochemical Industries Jerry Forest		New Building Siting Using Risk-Based Approach John N. Dyer	Chemical Incompatibility Matrices Michelle Murphy	Statistical Review of Runaway Reaction Kinetics Enio Kumpinsky
10:45 AM	Lyold F. Colegrove, The Dow Chemical Company Deborah Grubbe, Operations and Safety	A Miss, Amiss, a Near Miss John Wincek	Vision 20/20 Panel Facilitators: Jack McCavit & Cheryl A. Grounds	Evaluation of Uncertainty in Safety Integrity Level (SIL) Calculations Randy Freeman	Understanding the Effect of Fill-Ratio on Thermo-Kinetic Data Swati Umbrajkar	Emergency Relief System Design for Reactive System Using Direct Scale-up Method Surendra Singh
11:15 AM	Solutions, LLC Michael Firstenberg, Waterfall Security Solutions	Do We Really Need More Process Safety Leaders? Jennifer Mize		Identifying and Quantifying Major Hazard of Construction Lifting Activities Akhmad Harmantoro	Lending Industrial Experience through Reactive Hazard Examples in University Safety Instruction Henry T. Kohlbrand	Engineering Safe Pressure Relief for Existing Flare Systems Jay Riha & Steve Streblow
11:45 AM	Spring and (GCPS Joint Luncheon wi Lo	_	You think you have sat or, Salon F, G, H, J and I	•	ight of STS-73

	Case Histories and Lessons Learned – GCPS Joint Session Location: Conv. Ctr. Ballroom D Co-Chairs: Fred Henselwood, Kathy Shell and Kendall Werts
1:30 PM	Fire from the Cascading Failure of an Oxygen Supply System Delmar Morrison & Vijay Kumar
2:00 PM	Lessons Learned from an Incident at a Cryogenic Gas Processing Facility Adrian Pierorazio
2:30 PM	Cangrejera Learnings Jerry Forest
3:00 PM	Break
3:15 PM	U.S. Chemical Safety Board's Final Investigation Report on the Chevron Richmond Refinery Rupture and Fire Lauren Grim & Mark Wingard
4:00 PM	Bhopal 30 Years Later Ronald J. Willey & Dan Crowl
4:45 PM	GCPS Concluding Remarks