

9<sup>TH</sup> CCPS  
LATIN AMERICAN  
CONFERENCE  
ON PROCESS SAFETY



OCTOBER 18-20, 2022  
RIO DE JANEIRO, BRAZIL



# Braskem. TRANSFORMING THE FUTURE IN *real time.*

Braskem is the largest thermoplastic resin producer in the Americas and the leading producer of biopolymers in the world. In our Global Sustainable Development Strategy, our ambition is to be one of the leading companies in the petrochemical sector for Occupational Health & Safety and Process Safety.



## OUR AMBITION

Be among the best

GLOBAL CHEMICAL AND  
PETROCHEMICAL COMPANIES

in Occupational Health & Safety  
and Process Safety

## OUR GOALS

Reduce the frequency of personal accidents

REDUCE THE FREQUENCY OF  
PROCESS ACCIDENTS

Zeroing the number of occupational diseases  
Mitigate 100% of socio-environmental risks

22% Our progress

## OUR PERFORMANCE

Health & Safety are fundamental and non-negotiable values for Braskem. Our efforts have not been in vain: our results in terms of health and safety are among the best in the global chemical industry.

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# WELCOME

Dear Participant:

On behalf of the Center for Chemical Process Safety (CCPS), the American Institute of Chemical Engineers (AIChE) and, the Brazilian Mining Association (IBRAM), we are pleased to welcome you to the 9th CCPS Latin American Conference on Process Safety at the Prodigy Santos Dumont Hotel in Rio de Janeiro, Brazil from October 18-20, 2022.

This conference is part of the family of global CCPS conferences on Process Safety. This represents an important worldwide effort to prevent process safety events, and their impact on people, environment, and infrastructures, through the promotion of lifelong learning and continual improvement. This event is co-organized by CCPS and IBRAM, taking advantage of the synergies between both institutions, which share the common objective of improving the industry's performance in safety and sustainability.

CCPS and IBRAM would like to acknowledge our conference Chair and Co-Chairs, Eduardo Francisco – Vale (Chair), Sandro Franca – Acelen, Margareth Fernandez – Transpetro, Fabio Rossi – Petrobras, Julian Camargo – Ecopetrol, and Marco Aurélio Lima – Braskem (Co-Chairs), and the Technical Leadership Committee who dedicated numerous hours to create the technical program that you will enjoy at this conference.

Our sincere thanks go to our conference sponsors and to our exhibitors for demonstrating their leadership in Process Safety through their generous support. Without the commitment of these companies, this conference would not have been possible. We invite you to visit their stands to learn about how they can help you advance your efforts in process safety or to answer questions that you may have regarding their products.

Finally, we would like to thank all of you for your attendance and your desire to learn and share ideas on improving and advancing Process Safety through Risk Based Process Safety.

Process Safety is a continuously evolving discipline that moves forward thanks to your contribution and participation in these exchange events and in our projects. Your commitment to Process Safety makes a difference every day. CCPS's vision is "A World without Process Safety Incidents," and our motivation is to support our members and industry to reduce process safety events, and the impact on people, environment and infrastructures in Latin America and at the global scale.

We hope you enjoy this conference and we invite you to visit our exhibition stand to view our latest publications, learn about our projects and our upcoming global and regional conferences, and find out how you can become more involved in our activities to continue improving safety in the industry.

Sincerely,



**Louisa A. Nara**, CCPSC, CCEP  
Global Technical Director  
Center for Chemical Process Safety (CCPS)  
louana@aiche.org



**Raul Jungmann**  
CEO of IBRAM  
raul.jungmann@ibram.org.br

# ORGANIZING COMMITTEE



## **Eduardo Francisco, MScChE - AIChE/CCPS Fellow**

Chair of the 9th LACPS and Global PSM Senior Specialist, Vale (Brazil)

Eduardo Francisco has been working in Process Safety Management for more than 20 years, beginning as a process engineer. He has held leadership in HSE/PSM and strategic positions in process facilities operations, HSE and PSM in the process industry and currently serving as Global Corporate PSM Specialist at Vale. He also served as PSM specialist and PSM Latin America Manager for E.I. DuPont de Nemours & Co. for 15 years. Eduardo is graduated in Chemical Engineering at Universidade Federal do Rio Grande do Sul, Brazil, holds a MSc degree in Chemical Engineering from The University of Manchester, UK, a Post Graduation degree in Safety Engineering from the University of Guarulhos, Brazil and a Specialist degree in Waste Management from the University of Dresden, Germany. Eduardo is a Senior Member of AIChE and a CCPS Fellow.



## **Louisa Nara, CCPSC**

Global Technical Director, Center for Chemical Process Safety (CCPS)

As a global leader in process safety, Louisa brings over 40 years of expertise in process engineering, process safety, crisis management, and emergency response. She joined AIChE's Center for Chemical Process Safety (CCPS) in 2010 and, in 2017, assumed her current role as Global Technical Director. Louisa began her work at the site level in operations and process engineering and continued, successively, in regional and global technical leadership roles. She gained hands-on experience preventing, investigating, and responding to significant incidents through on-site leadership roles, corporate oversight positions, and consulting. Before joining CCPS, Louisa was Director, Risk Management and Compliance for Bayer MaterialSciences NAFTA Region (now Covestro).

Louisa has a BSChE from West Virginia University (1981), an MS in Environmental Engineering from Villanova University (1989). She is presently pursuing a Ph.D. at the Indiana University of Pennsylvania in Safety Sciences (2021-). Louisa is a Certified Process Safety Professional (CCPSC), a CCPS Fellow and an AIChE Fellow.



# ORGANIZING COMMITTEE



**Carmen H. Osorio Amado, Ph.D.**

Latin America Regional Manager, Center for Chemical Process Safety (CCPS)

Carmen Helena has more than 17 years of combined experience in the industry, research, and academia, mainly focused in the field of chemical process safety. She has a strong background in Process Safety Management (PSM) systems, fire safety, combustion science, reactive chemicals, management of hazardous materials, process hazard analysis, and risk assessments. Before joining the CCPS in 2022, Carmen Helena was a Senior Associate in the Thermal Science Practice at Exponent, where she was involved in different incident investigations. Dr. Osorio's previous experience includes working as a Process Safety and Risk Engineer at BP America while supporting offshore operations in the Gulf of Mexico. Carmen was also part of the Mary Kay O'Connor Process Safety Center and the Turbomachinery Lab at TAMU, where she worked as Research assistant while completing her graduate studies. Carmen Helena is using her technical expertise and soft skills at her current position as the CCPS Regional Manager to better promote Process Safety in Latin America and persist through challenges with the support of others to succeed. Carmen Helena received her Bachelor's degree in Chemical Engineering from the Univ. Industrial of Santander, Colombia, and a Ph.D. degree in Material Science and Engineering from Texas A&M Univ. She is fluent in English and Spanish.



# ORGANIZING COMMITTEE

## LEADERSHIP TEAM

Eduardo De Maio Francisco, Vale  
Louisa Nara, CCPS  
Dr. Carmen H. Osorio Amado, CCPS  
Christa Pennino, CCPS  
Fábio Leandro Rossi, Petrobras  
Julian Camargo, Ecopetrol  
Margareth Fernandez, Transpetro  
Marco Aurélio Lima, Braskem  
Sandro França, Acelen

## CCPS/IBRAM LOGISTICS TEAM

Louisa A. Nara, CCPS  
Dr. Carmen H. Osorio Amado, CCPS  
John Ellertson, CCPS  
Christa Pennino, CCPS  
Karla Izquierdo, CCPS  
Carolina Santana, CCPS  
Claudia Pellegrinelli, IBRAM  
Júlio Cesar Nery, IBRAM  
Osny Vasconcellos, IBRAM  
Patrícia Lane Gonçalves da Cruz, IBRAM  
Patricia Moreira, IBRAM  
Paulo Henrique Leal Soares, IBRAM  
Mirka Schreck, IBRAM

## TECHNICAL SESSION CHAIRS

Alexandre Glitz, CCPS Staff Consultant  
Américo D. Carvalho Neto, RSE Consultoria  
Daniela Revez, Cargill  
Eduardo De Maio Francisco, Vale  
Fabio Leandro Rossi, Petrobras  
Dr. Jack Chosnek, KnowledgeOne  
Jérôme Taveau, Jensen Hughes  
Julian Camargo, Ecopetrol  
Laurence Pereira, Petrobras  
Leandro Luis Blas, YPF  
Luana Marques, Transpetro  
Lucas Almeida, Ternium  
Marco Lima, Braskem  
Margareth Fernandez, Transpetro  
Matías Massello, PII  
Nestor Sposito, CCPS  
Oscar Del Aguila Chumbe, Pluspetrol  
Paula Ines Barrios, Pan American Energy  
Roberto Ruiz, PSRG  
Sandro França, Acelen  
Dr. Scott G. Davis, Gexcon  
Dr. Delmar “Trey” Morrison, Exponent

## EXHIBITORS

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MineARC Systems  
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Process safety

# An Acelen Value



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## Accelerating investments to increase both efficiency and safety

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Installed in the state of Bahia, Mataripe was Brazil's first Refinery and, being the second largest, is

currently responsible for 14% of the country's refining, with a capacity to produce 302,000 barrels/day and over 30 derivatives.

In 2022 Acelen accelerated R\$ 1.1 billion in investments to increase the Refinery's operating efficiency and safety. This level of care is a consequence of the commitment of our leadership in building a culture integrating process safety by leveraging modern technologies and world-class technical and standardization resources. We work tirelessly and evolve continuously to be the benchmark in process safety.



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# KEYNOTE SPEAKERS



## **Gilfranque Leite**

Braskem

Gilfranque Leite is Chemical Engineer, with an MSc in Chemical Process Control and an MBA in Project Management. He has 27 years of experience in oil and petrochemical companies, with leadership roles in Operation, Process Engineering, Project and Capital Expenditure, Innovation and Technology. Since 2021, he leads the Global HSE (Health, Safety and Environment) and Industrial Efficiency areas for Braskem.



## **Flaubert Matos Machado**

Petrobras

Flaubert Matos Machado have been working in Petrobras for 19 years, beginning as an Equipment Engineer. He has held leadership positions in offshore production facilities operations, maintenance, inspection and HSE. Flaubert is currently serving as HSE Strategy and Center of Excellence General Manager in Petrobras, including the Process Safety Corporate Department, among other disciplines. He is an experienced manager in the area of Safety Management System implementation, graduating in Mechanical Engineering and Strategic and Economic Business Management, MBA.



## **Claudemir Peres**

Vale

Executive MBA Economics and Business Management - INSPER  
Specialization in Quality and Productivity – USP Fundação Vanzolini  
Industrial Chemistry – Oswaldo Cruz University

Claudemir has 35 years of experience in the mining and chemical/petrochemical industries, having worked globally in operational risk management, process safety, industrial management and in the integrated system (Health, Workplace and Process Safety, Environment, Quality, Social Responsibility, and Sustainability).

# WORKSHOP INSTRUCTORS

## Pre-conference Workshop: Fundamentals of Accidental Fires and Explosions

### INSTRUCTORS:



**Delmar R. Morrison, III, Ph.D., P.E., CCPSC, FAIChE, CFEI**

Exponent

Dr. Delmar “Trey” Morrison is a chemical engineer and U.S. licensed professional engineer with over 20 years’ experience in analyzing and investigating chemical and manufacturing processes in domestic and international settings. He was recently elected a Fellow of the American Institute of Chemical Engineers, a distinctive recognition of his career contributions to the field of chemical engineering. Most of his work has been focused on analysis of equipment, systems, and processes encompassing mechanical equipment, process control, and human interactions in chemical and petrochemical process plants, oil and gas, agricultural and food process plants, and equipment manufacturing plants. Dr. Morrison is a Certified Process Safety Professional through CCPS. His work in industrial settings has been both proactive – aiding clients in identifying and managing risks – and reactive – investigating the root causes of complex incidents. He leverages his expertise in over twenty years of incident investigation to lead clients in both traditional and specialized hazard and risk analysis techniques. Dr. Morrison has led hazard and risk assessments using industry-accepted process hazard analysis (PHA) methods including HAZOP studies, What-If studies, and LOPA studies, combined with analytical techniques such as Fault Tree Analysis, Event Tree Analysis, Human Reliability Analysis, Root Cause Analysis, Consequence Analysis, Transportation Risk Analysis, and Quantitative Risk Assessment.



**Claudio V.B. Fávero, Ph.D.**

Exponent

Dr. Fávero is a chemical engineer in Exponent’s Thermal Sciences Practice, consulting primarily in the areas of oil and gas, process safety and risk analysis, and advanced thermal fluid analysis. He specializes in the investigation and analysis of reactive flow processes. During his time at Exponent, Dr. Fávero has analyzed the hazards of flammable liquid storage and dispensing systems, conducted studies of laminar and turbulent flow of non-Newtonian fluids, and investigated the failure of multiple pressurized gas systems. He has extensive experience in reactive flow process, upstream (petroleum) engineering, and flow assurance with emphasis on asphaltene and waxes deposition.

# PANELISTS

## Emerging Technologies and Process Safety Challenges

### PANELISTS:



#### **Geovane Consul**

CEO of BPBunge Bioenergia

Chemical Engineer from UFRGS University, 1987, MBA UFRGS 2000, PED – Program for Executive Development – IMD Switzerland, 2004. Has worked for 15+ years as process and project engineer, both in Brazil and abroad and since 2019 is the CEO of BPBunge Bioenergia, a JV between BP and Bunge for renewable energy in Brazil. Has also served as Executive Vice President of Bunge Sugar & Bioenergy Division from 2013-2019 as well as COO for Bunge Agribusiness in Brazil from 2009-2013.



#### **Alyse Keller**

AcuTech Group, Inc.

Alyse has almost 10 years of experience in the oil, gas, and chemicals industries, having worked in oil refineries, industry trade associations, and currently as a process safety engineering consultant with AcuTech Group, Inc. Her main areas of focus include process safety risk assessments, audits, regulatory compliance, operational excellence, sustainability, training, and industry advocacy. Alyse is passionate about designing a safe work environment and finds success in leveraging boots on the ground insight with technology tools to help develop sustainable solutions. She is a leader of the Washington, D.C. Alumni Chapter for the Colorado School of Mines.



#### **Vivian Passos de Souza, Ph.D.**

Petrobras

Dr. Vivian Passos holds a degree in Chemical Engineering from the Federal Rural University of Rio de Janeiro (1999) and a PhD in the Graduate Program in Chemical Engineering from the Federal University of São Carlos (2011). She worked in Industrial Engineering at Sanofi between 2000 and 2002. Since 2002, Dr. Vivian has been working in Petrobras as a Processing Engineer at CENPES in the Hydro-processing area in the management, development and implementation of projects and technical assistance to industrial units. Dr. Vivian has also worked as Safety Innovation Lab Manager since 2022, providing innovation in Health, Occupational Safety and Process Security to refineries, thermoelectric, gas, exploration & production and engineering at Petrobras with focus in implantation.



# PROGRAM AT-A-GLANCE

## MONDAY, OCTOBER 17, 2022

13:00 – 19:00	<b>EARLY CHECK-IN</b> – Foyer
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## TUESDAY, OCTOBER 18, 2022

7:00 – 17:00	<b>CHECK-IN (ALL DAY)</b> – Foyer		
8:00 – 10:00	<b>PRE-CONFERENCE COURSE</b> – Fundamentals of Accidental Fires and Explosions – Exponent; Location: Auditorium Delmar R. Morrison, III, Ph.D., P.E., CCPSC, FAICHe, CFEI Claudio V.B. Fávero, Ph.D.		
10:00 – 10:30	<b>COFFEE BREAK</b> – Sponsored by Vale; Foyer (30 min)		
10:30 – 12:00	<b>OPENING CEREMONY</b> – Location: Auditorium <b>SAFETY MOMENT</b> <b>INTRODUCTION TO THE 9<sup>TH</sup> LACPS AND GENERAL GUIDELINES</b> Paulo Henrique Soares, Corporate Communications Director at IBRAM <b>WELCOME SPEECH</b> Louisa A. Nara – Technical Director of the Center for Chemical Process Safety (CCPS) Julio Cesar Nery Ferreira – Director of Sustainability and Regulatory Affairs of The Brazilian Mining Association (IBRAM) <b>KEYNOTE PRESENTATION</b> Process Safety Management and the Mining Industry - Vale's Experience; Claudemir Peres (Vale)		
12:00 – 13:00	<b>MID-DAY BREAK</b>		
	<b>ROOM 1</b>	<b>ROOM 2</b>	<b>ROOM 3</b>
13:00 – 15:00	<b>PSM IMPLEMENTATION I</b> Chair: Leandro Luis Blas; YPF	<b>LESSONS LEARNED ON PROCESS SAFETY</b> Chair: Eduardo Francisco; Vale	<b>LEADERSHIP IN PROCESS SAFETY</b> Chair: Margareth Fernandez; Transpetro
15:00 – 15:30	<b>COFFEE BREAK</b> – Sponsored by RSE; Foyer (30 min)		
15:30 – 17:30	<b>ASSET INTEGRITY</b> Chair: Dr. Scott G. Davis; Gexcon	<b>PSM IMPLEMENTATION II</b> Chair: Daniela Revez; Cargill	<b>CASE STUDIES ACROSS THE INDUSTRIES I</b> Chair: Alexandre Glitz; CCPS Emeritus

## WEDNESDAY, OCTOBER 19, 2022

7:00 – 17:00	<b>CHECK-IN (ALL DAY)</b> – Foyer		
8:00 – 8:45	<b>SAFETY MOMENT</b> <b>KEYNOTE PRESENTATION</b> – Location: Auditorium Process Safety in Braskem – Present and Future; Gilfranque Da Silva Leite (Braskem)		
8:45 – 10:00	<b>PANEL DISCUSSION</b> – Emerging Technologies and Process Safety Challenges; Location: Auditorium Panelists: Vivian Passos de Souza (Petrobras), Geovane Consul (BP Bunge Bioenergia), and Alyse Keller (Acutech) Moderated by Dr. Anil Gokhale; Sr. Director at CCPS		
10:00 – 10:30	<b>COFFEE BREAK</b> – Sponsored by Braskem; Foyer (30 min)		
	<b>ROOM 1</b>	<b>ROOM 2</b>	<b>ROOM 3</b>
10:30 – 12:00	<b>ALARM MANAGEMENT AND SAFETY BARRIERS</b> Chair: Lucas Almeida; Ternium	<b>SUSTAINABILITY AND CLIMATE CHANGE</b> Chair: Luana Marques; Transpetro	<b>FOOD AND BIOTECHNOLOGY INDUSTRY I</b> Chair: Américo D. Neto; RSE
12:00 – 13:00	<b>MID-DAY BREAK</b>		

NOTE: Attendance to the pre-conference workshop does not require separated registration. In-person registration will not be available at the venue. For recent updates please check the app.

# PROGRAM AT-A-GLANCE

## WEDNESDAY, OCTOBER 19, 2022 (CONTINUED)

13:00 – 15:00	<b>MANAGEMENT OF CHANGE</b> Chairs: Matías Massello; PII Oscar L. Del Aguila; Pluspetrol	<b>CYBERSECURITY</b> Chair: Dr. Delmar “Trey” Morrison; Exponent	<b>PROCESS SAFETY AND H2 TECHNOLOGY</b> Chair: Jérôme Taveau; Jensen Hughes
			<b>CASE STUDIES IN AUDITING</b> Chair: Jérôme Taveau Jensen Hughes
15:00 – 15:30	<b>COFFEE BREAK</b> – Sponsored by Acelen; Foyer (30 min)		
15:30 – 17:00	<b>CASE STUDIES ACROSS THE INDUSTRIES II</b> Chair: Dr. Jack Chosnek; KnowledgeOne	<b>MINING INDUSTRY I</b> Chair: Fábio Leandro Rossi; Petrobras	<b>PROCESS SAFETY CULTURE I</b> Chair: Laurence Pereira Lima; Petrobras

## THURSDAY, OCTOBER 20, 2022

7:00 – 9:00	<b>CHECK-IN</b> – Foyer		
8:00 – 8:45	<b>SAFETY MOMENT</b> <b>KEYNOTE PRESENTATION</b> – Location: Auditorium Process Safety as an Important Pillar of ESG Strategy; Flaubert Matos Machado (Petrobras)		
8:45 – 9:30	<b>COFFEE BREAK</b> – Sponsored by Petrobras; Foyer (30 min)		
	<b>ROOM 1</b>	<b>ROOM 2</b>	<b>ROOM 3</b>
9:30 – 11:30	<b>BARRIER MANAGEMENT AND PROTECTIVE SYSTEMS I</b> Chair: Nestor Sposito; PPR Consultora	<b>MINING INDUSTRY II</b> Chair: Sandro França; Acelen	<b>FOOD AND BIOTECHNOLOGY INDUSTRY II</b> Chair: Américo Neto; RSE
11:30 – 12:30	<b>MID-DAY BREAK</b>		
12:30 – 14:30	<b>PROCESS SAFETY CULTURE II</b> Chair: Julian Camargo; Ecopetrol	<b>BARRIER MANAGEMENT AND PROTECTIVE SYSTEMS II</b> Chair: Marco Lima; Braskem	<b>CASE STUDIES ACROSS INDUSTRIES III</b> Chair: Roberto Ruiz; PSRG
14:30 – 15:00	<b>COFFEE BREAK</b> – Sponsored by Acutech; Foyer (30 min)		
15:00 – 15:45	<b>CLOSING CEREMONY</b> – Review of the content; Best Presentation Award, Survey; Location: Auditorium Raul Jungmann; CEO of IBRAM Eduardo De Maio Francisco; Chair of the 9th LACPS and Global PSM Senior Specialist at Vale Louisa Nara; Technical Global Director of the CCPS Dr. Anil Gokhale; Sr. Director at CCPS		

NOTE: In-person registration will not be available at the venue.  
For recent updates please check the app.



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# TECHNICAL PRESENTATIONS

**TUESDAY, OCTOBER 18, 2022**

<b>TUESDAY, OCTOBER 18, 2022</b>					
<b>PSM IMPLEMENTATION I</b> CHAIR: LEANDRO LUIS BLAS (YPF)		<b>LESSONS LEARNED ON PROCESS SAFETY</b> CHAIR: EDUARDO FRANCISCO (VALE)		<b>LEADERSHIP IN PROCESS SAFETY</b> CHAIR: MARGARETH FERNANDEZ (TRANSPETRO)	
(S)	<b>IMPLEMENTACIÓN SISTEMA RBPS EN INSTALACIÓN ALTO RIESGO SIN SISTEMA FORMAL DE GESTIÓN</b> J. Corredor Garcia, N. Sposito Sr., J. Murphy, and J. Diaz / Process Safety Services, Brinsa, PPR Consultoria 13:00-13:30 / Room 1	(E)	<b>WHEN EMERGENCY RESPONSE GOES FATALLY WRONG: LESSONS LEARNED FROM INVESTIGATING TWO MAJOR INCIDENTS</b> S. G. Davis / Gexcon 13:00-13:30 / Room 2	(E)	<b>HOW DO WE PREVENT LOSING SIGHT IN RISK ASSESSMENTS</b> T. Groman / AcuTech 13:00-13:30 / Room 3
(S)	<b>PROCESS SAFETY MANAGEMENT IN COLOMBIA: A STATE-OF-THE-ART REVIEW</b> A. Pacheco / Cargill 13:30-14:00 / Room 1	(E)	<b>WHAT INCIDENTS TEACH US ABOUT PROCESS SAFETY KNOWLEDGE MANAGEMENT</b> M. Munsil / PSRG 13:30-14:00 / Room 2	(E)	<b>PROCESS SAFETY ONBOARDING FOR LEADERS</b> L. Camona and C. Urdaneta / Chevron Global Technology Services 13:30-14:00 / Room 3
(S)	<b>CAPTURANDO LAS EMISIONES FUGITIVAS: IMPLEMENTACIÓN DEL PLAN</b> O. Del Aguila Chumbe and I. M. Causso Astete Sr. / Pluspetrol Peru Corporation 14:00-14:30 / Room 1	(P)	<b>SEPROCURA: UMA SOLUÇÃO BEM-SUCEDIDA PARA APOIO À ANÁLISE HISTÓRICA E INVESTIGAÇÃO DE ACIDENTES</b> A. Aguiar, C. Batista, D. Haddad, I. Pinheiro, R. Moreira Sr., M. Pessanha, L. Pereira Sr., M. Carvalho, E. Santos, I. DA Silva, and J. Pessoa / Petrobras 14:00-14:30 / Room 2	(P)	<b>DEVELOPMENT OF PROCESS SAFETY KNOWLEDGE FOR SENIOR OPERATIONS LEADERSHIP</b> G. Peron, D. Revez, and F. Hosenen / Cargill 14:00-14:30 / Room 3
(S)	<b>“GAP ANALYSIS” COMO HERRAMIENTA CLAVE PARA LA IMPLEMENTACIÓN Y MEJORA DE UN SISTEMA DE GESTIÓN DE SEGURIDAD DE PROCESOS</b> J. Camargo and A. C. Morales / Ecopetrol 14:30-15:00 / Room 1	(P)	<b>ORGANIZATIONAL FACTORS AND MAJOR ACCIDENTS</b> L. C. Fonte Nova de Assumpção and J. A. Machado / Acelen 14:30-15:00 / Room 2	(P)	<b>GERENCIAMENTO DE SEGURANÇA DE PROCESSOS NA DORF KETAL BRASIL</b> S. Moretti and A. Machado / Dorf Ketal 14:30-15:00 / Room 3

**E:** English | **P:** Portuguese | **S:** Spanish

NOTE: For recent updates please check the app.

# TECHNICAL PRESENTATIONS

## TUESDAY, OCTOBER 18, 2022 (CONTINUED)

ASSET INTEGRITY CHAIR: DR. SCOTT G. DAVIS (GEXCON)		PSM IMPLEMENTATION II CHAIR: DANIELA REVEZ (CARGILL)		CASE STUDIES ACROSS THE INDUSTRIES I CHAIR: ALEXANDRE GLITZ (CCPS CONSULTANT)	
(S)	<b>GESTIÓN DE INTEGRIDAD DE DUCTOS: DETECCIÓN, CONTROL Y MITIGACIÓN DE AMENAZAS</b> B. Bajda and G. Barragan / YPF 15:30-16:00 / Room 1	(P)	<b>USE OF PROCESS SAFETY TOOLS IN THE EVALUATION OF ROAD TRANSPORTATION INCIDENTS</b> J. C. Gregoris / DOW 15:30-16:00 / Room 2	(P)	<b>MIXED APPLICATION OF CREAM &amp; FTA TO EVALUATE THE NON-TECHNOLOGICAL BARRIERS AGAINST THE FORMATION OF EXPLOSIVE ATMOSPHERES IN FPSO CARGO TANKS</b> H. L. Oliveira, M. T. Lopes, S. J. de Farias Oliveira, F. A. D. R. Agura, G. Miscow, I. Majerowicz, M. G. Ferrares, M. O. Mognato, P. P. Rodrigues, C. V. R. D. O. E. Correa, and C. R. G. D. Carvalho / Petrobras 15:30-16:00 / Room 3
(S)	<b>UNDERSTANDING THE IMPORTANCE OF MECHANICAL INTEGRITY PROGRAM</b> R. Ruiz Vásquez / PSRG 16:00-16:30 / Room 1	(P)	<b>RELEITURA DA ABORDAGEM DE PSM APLICADA PARA ATIVOS DO SISTEMA ELÉTRICO</b> E. Castro and C. Vasconcelos / Vale 15:30-16:00 / Room 2	(P)	<b>WHY TANKS AND PRESSURE VESSELS PROTECTION FAILS OR ARE UNDERESTIMATED AND STILL ARE THE CAUSE OF EVENTS ON 2022?</b> M. Bittencourt / Acelen 15:30-16:00 / Room 3
(P)	<b>ASSET INTEGRITY MANAGEMENT IN MATURE PROCESS PLANTS</b> A. Vazzoler Sr. / Senai Cetiqt 16:30-17:00 / Room 1	(S)	<b>HOLISTIC SEMIQUANTITATIVE APPROACH FOR PROCESS SAFETY MANAGEMENT APPLIED TO OIL &amp; GAS WELLS</b> S. Rivas Johnson Sr. / Pan American Energy 16:30-17:00 / Room 2	(P)	<b>COMPARISON OF RISK BASED METHODOLOGIES FOR STRUCTURAL RESPONSE ANALYSIS IN CASE OF FIRE IN OFFSHORE PROCESS FACILITIES</b> N. Paruolo, R. Pereira, E. Braga, P. Teixeira, and M. Perez / DNV 16:30-17:00 / Room 3
(E)	<b>ASSET INTEGRITY FOR AGING PLANTS - ENSURING SAFETY OPERATIONS OVER TIME</b> R. Weber and R. Ruiz Vásquez / PSRG 17:00-17:30 / Room 1	(P)	<b>ESTUDO DE GAP ANALYSIS – REGULAMENTAÇÃO BRASILEIRA X RBPS-CCPS</b> A. S. Neto, P. Valezin, and R. Pinto / ERM-Brasil 17:00-17:30 / Room 2	(S)	<b>DESARROLLO E IMPLEMENTACIÓN DE SISTEMA DE PREVENCIÓN DE SOBRELLENADO DE CISTERNAS DE CAMIONES EN TERMINALES DE COMBUSTIBLE</b> M. A. Bertrand Covas Sr. / YPF 17:00-17:30 / Room 3

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# TECHNICAL PRESENTATIONS

WEDNESDAY, OCTOBER 19, 2022

ALARM MANAGEMENT AND SAFETY BARRIERS CHAIR: LUCAS ALMEIDA (TERNIUM)		SUSTAINABILITY AND CLIMATE CHANGE CHAIR: LUANA MARQUES (TRANSPETRO)		FOOD AND BIOTECHNOLOGY INDUSTRY I CHAIR: AMERICO D. CARVALHO NETO (RSE CONSULTORIA)	
(P)	<b>DYNAMIC PROCESS SAFETY BARRIERS MANAGEMENT AT PETROBRAS</b> A. Dantas, F. Rossi, and L. H. Figueira / Petrobras 10:30 – 11:00 / Room 1	(S)	<b>IMPORTANCIA DEL ANÁLISIS DE RIESGO FÍSICOS POR CAMBIO CLIMÁTICO EN LA INDUSTRIA DE PROCESOS (APLICACIÓN DE CASO)</b> O. Rios, E. Flores, and J. L. Monroy / ERM-Mexico 10:30 – 11:00 / Room 2	(P)	<b>ASPECTOS REGULATÓRIOS DE ANÁLISE DE RISCOS COM PÓS NO BRASIL</b> A. Ribeiro, I. Santos / ARRISK Consulting G. L. Ribeiro / Susano Papel e Celulose 10:30 – 11:00 / Room 3
(S)	<b>IMPROVEMENT IN PROCESS SAFETY PERFORMANCE FROM THE MONITORING AND EVALUATION OF AN ALARM MANAGEMENT SYSTEM</b> R. Romero Bayona and R. Camerano / Ecopetrol 11:00 – 11:30 / Room 1	(P)	<b>IMPACTOS DAS ALTERAÇÕES CLIMÁTICAS NA SEGURANÇA DE PROCESSOS (IMPACTS OF CLIMATE CHANGE ON PROCESS SAFETY)</b> C. Pacheco de Souza / Oxiteno 11:00 – 11:30 / Room 2	(P)	<b>A JORNADA DE IMPLEMENTAÇÃO DE PSM EM UMA EMPRESA DO SETOR SUCROENERGÉTICO</b> G. Carrazoni Sr. and G. Requi / BPBunge Bionergia 11:00 – 11:30 / Room 3
(S)	<b>DESARROLLO DE TABLEROS DE GESTIÓN DE ALARMAS AD HOC BASADOS EN PLATAFORMAS BI (BUSINESS INTELLIGENCE)</b> G. Markowski Sr. and H. Tradatti Sr. / YPF 11:30 – 12:00 / Room 1	(P)	<b>ORGANIZATIONAL CONTROL FOR SAFETY, A CHALLENGE IN SOCIOECONOMIC AND NATURAL ENVIRONMENT</b> S. Ávila Filho / Federal University of Bahia 11:30 – 12:00 / Room 2	(P)	<b>PRONTIDÃO OPERACIONAL: BOAS PRÁTICAS DE STARTUP DE PLANTAS DE PROCESSO PARA EVITAR ACIDENTES DE SEGURANÇA DE PROCESSOS</b> C. Santana / Cargill 11:30 – 12:00 / Room 3

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# TECHNICAL PRESENTATIONS

## WEDNESDAY, OCTOBER 19, 2022 (CONTINUED)

MANAGEMENT OF CHANGE CHAIRS: MATÍAS MASSELLO (PII) OSCAR DEL AGUILA (PLUSPETROL)		CYBERSECURITY CHAIR: DR. DELMAR "TREY" MORRISON (EXONENT)		PROCESS SAFETY AND H2 TECHNOLOGY CHAIR: JÉRÔME TAVEAU (JENSEN HUGHES)	
(S)	<b>ADMINISTRACIÓN DE CAMBIOS MULTIDISCIPLINARIO</b> A. Hernandez Garcia / Indorama Ventures IOD 13:00-13:30 / Room 1	(E)	<b>CONDUCTING HYBRID SECURITY RISK ASSESSMENTS TO ADDRESS PHYSICAL CYBERSECURITY EXPOSURES</b> A. Keller / Acutech 13:00-13:30 / Room 2	(E)	<b>IMPROVING OUR UNDERSTANDING OF HYDROGEN THROUGH TESTING AND ADVANCED MODELING TO AVOID POSSIBLE PITFALLS AND ENSURE ITS SAFE USE</b> S. G. Davis / Gexcon 13:00-13:30 / Room 3
(S)	<b>IMPLEMENTACIÓN DE PSSR PARA MOCs DURANTE PARADA DE PLANTA EN REFINERÍA CAMPANA, PAE</b> P. I. Barrios and M. Mariño / Pan American Energy 13:30-14:00 / Room 1	(P)	<b>TOWARDS THE APPLICATION OF A NEW METHODOLOGY TO IDENTIFY CYBER AND PHYSICAL RISKS IN INDUSTRY 4.0</b> M. F. Santos, W. Melo Jr Sr., and E. Magalhães Sr. / National Institute of Metrology, Quality, and Technology 13:30-14:00 / Room 2	(E)	<b>HYDROGEN VENTING, LESSONS LEARNT FOR SAFE DESIGN AND OPERATION</b> A. Ferreira, D. Miller, and S. Dharmavaram / Air Productos 13:30-14:00 / Room 3
<b>CASE STUDIES IN AUDITING</b> CHAIR: JÉRÔME TAVEAU (JENSEN HUGHES)					
(S)	<b>GESTIONANDO EL RIESGO DURANTE LA GESTIÓN DE CAMBIOS</b> J. Chosnek / KnowledgeOne LLC 14:00-14:30 / Room 1	(P)	<b>CYBERSECURITY ARCHITECTURE FOR REMOTE SAFETY MANAGEMENT</b> F. Bongiorno Arasanz, B. Cordeiro, and F. B. Bemelmans / Schneider Electric Process Automation 14:00-14:30 / Room 2	(P)	<b>AUDITORIAS INTERNAS DE SEGURANÇA DE PROCESSO: FATORES CRÍTICOS DE SUCESSO</b> C. Barretto, A. R. Lanfredi Sr., and A. Scavarda / Petrobras 14:00-14:30 / Room 3
(P)	<b>MOC REALIZADO EM BARREIRAS DE SEGURANÇA REQUER UMA GESTÃO E DISCIPLINA DIFERENCIADOS</b> A. Carvalho Neto Sr. / RSE 14:30-15:00 / Room 1	(S)	<b>¿COMO CUMPLIR CON EL REQUISITO DE SEGURIDAD CIBERNETICA DURANTE EL PHA? UNA PROPUESTA SIMPLE</b> R. Rodriguez / CSF 14:30-15:00 / Room 2	(P)	<b>PROCESS SAFETY DOSSIERS FOR BARRIER AUDIT</b> B. Alves, B. D. Barbabela, M. Lima, F. Sá, and L. Helena / SBM Offshore 14:30-15:00 / Room 3

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# TECHNICAL PRESENTATIONS

## WEDNESDAY, OCTOBER 19, 2022 (CONTINUED)

CASE STUDIES ACROSS THE INDUSTRIES II CHAIR: DR. JACK CHOSNEK (KNOWLEDGEONE)		MINING INDUSTRY I CHAIR: FÁBIO LEANDRO ROSSI (PETROBRAS)		PROCESS SAFETY CULTURE I CHAIR: LAURENCE PEREIRA LIMA (PETROBRAS)	
(S)	<b>VULNERABILIDAD Y MAPA DE CALOR DE LAS INSTALACIONES</b> M. V. Fernandez Terenzi and F. Pawolocki / YPF 15:30 – 16:00 / Room 1	(P)	<b>IMPLEMENTAÇÃO DE UM SISTEMA DE GESTÃO DE BARRAGENS E REJEITOS E SUAS CONTRIBUIÇÕES PARA SEGURANÇA DO PROCESSO</b> F. Costa, R. Bittar, and L. Duarte / Vale 15:30 – 16:00 / Room 2	(E)	<b>LEARN OR LANGUISH: CREATING A CULTURE THAT LEARNS FASTER THAN IT FAILS</b> B. Hughes / Sologic 15:30 – 16:00 / Room 3
(S)	<b>ESTAMOS APRENDIENDO DE NUESTROS INCIDENTES? UN ANALYSIS BASADO EN INCIDENTES COMUNES EN LA INDUSTRIA DEL PETROLEO</b> J. C. Rodriguez / Hocol 16:00 – 16:30 / Room 1	(P)	<b>IDENTIFICAÇÃO DE PERIGOS E ANÁLISE DE RISCOS NA INDÚSTRIA DA MINERAÇÃO</b> A. Carvalho Neto Sr. and A. Silva / RSE 16:00 – 16:30 / Room 2	(P)	<b>FORTELECIMENTO DA CULTURA DE SEGURANÇA ATRAVÉS DO COMPARTILHAMENTO DE LIÇÕES APRENDIDAS DE INCIDENTES DE PROCESSO</b> F. Silva Sr. / C2 PSM Consultoria 16:00 – 16:30 / Room 3
(S)	<b>CASO DE ESTUDIO EVOLUCIÓN DEL CONOCIMIENTO, COMPETENCIAS Y SU IMPACTO EN LOS INDICADORES TIER 3 Y TIER 4 SEGÚN API RP 754</b> F. Gimenez and M. E. Aguirre / YPF 16:30 – 17:00 / Room 1	(P)	<b>RECENTES DESENVOLVIMENTOS TÉCNICOS NA REDUÇÃO RISCOS COM COMBUSTÍVEIS ATRAVÉS DO USO DE ADITIVOS ESPECIAIS NA INDÚSTRIA DE MINERAÇÃO</b> A. Apostolo and A. Machado / Dorf Ketal 16:30 – 17:00 / Room 2	(P)	<b>PROGRAMA OPERADOR SEPRO - REFORÇANDO A CULTURA DE SEGURANÇA DE PROCESSO NAS EQUIPES OPERACIONAIS</b> E. Ramos Junior Sr. / Braskem 16:30 – 17:00 / Room 3

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# TECHNICAL PRESENTATIONS

THURSDAY, OCTOBER 20, 2022

BARRIER MANAGEMENT AND PROTECTIVE SYSTEMS I CHAIR: NESTOR SPOSITO (PPR CONSULTORA)		MINING INDUSTRY II CHAIR: SANDRO FRANÇA (ACELEN)		FOOD AND BIOTECHNOLOGY INDUSTRY II CHAIR: PAULA INES BARRIOS (PAN AMERICAN)	
(S)	<b>QUÉ TAN PREVENTIVAS SON LAS BARRERAS DE MITIGACIÓN?</b> R. Cuestas / Ecopetrol 09:30 – 10:00 / Room 1	(E)	<b>EMERGING TECHNOLOGIES AS A VENUE TO DECREASE INCIDENTS RELATED TO METHANE EXPLOSIONS IN COLOMBIAN COAL MINES</b> L. Vallejo Molina, A. Molina Ochoa, D. Soto, S. Lopez, J. M. Molina, L. H. Copete, and A. F. Ortiz Prada / Universidad Nacional de Colombia 09:30 – 10:00 / Room 2	(E)	<b>AN UNEXPECTED EXPLOSION WHILE FUMIGATING A GRAIN SILO – IT WASN'T THE DUST</b> D. Morrison, D. Revez, T. Lardinois, and G. Peron / Exponent Inc 09:30 – 10:00 / Room 3
(S)	<b>DE LA ESTANTERÍA A BIG DATA: GESTIÓN DE BARRERAS DE ESTUDIOS HAZOP</b> E. Rossini and K. Schanton / YPF 10:00 – 10:30 / Room 1	(P)	<b>MANAGEMENT OF CHANGE FOR THE MINING AND ORE PROCESSING INDUSTRY VALE'S EXPERIENCE</b> E. Francisco, J. Mello, and C. Peres / Vale 10:00 – 10:30 / Room 2	(E)	<b>KEY CONSIDERATIONS AND APPLICATIONS OF COMMON CALORIMETRIC LABORATORY PROCESS SAFETY TOOLS TO EVALUATE REACTIVE HAZARDS</b> E. Raines / Fauske & Associates LLC 10:00 – 10:30 / Room 3
(S)	<b>OPERAR EL SIS, UN LARGO Y TORTUOSO CAMINO</b> R. Rodriguez / CSF 10:30 – 11:00 / Room 1	(P)	<b>MINING PROCESS SAFETY: ELIMINATION OF CATASTROPHIC RISKS IN BELT CONVEYORS</b> C. Romanha Sr., L. Irias Sr., and T. Magalhães Sr. / Hatch 10:30 – 11:00 / Room 2	(E)	<b>ANALYSING ORGANIZATIONAL GAPS IN PROCESS ACCIDENTS WITH FRAM: THE CASE OF THE IMPERIAL SUGAR REFINERY EXPLOSION (2008)</b> J. Franca, M. I. Vaz, B. Rodrigues Coutinho, and L. Pina / KTH Royal Institute of Technology 10:30 – 11:00 / Room 3
(S)	<b>GESTIÓN DINÁMICA DE RIESGOS Y RONDAS OPERACIONALES DE AUTO GESTIÓN</b> J. L. Lacayo Mendoza and H. A. Gamboa Gomez / Ecopetrol 11:00 – 11:30 / Room 1	(P)	<b>USE OF THE BOWTIE TOOL TO DEVELOP REGULATORY STANDARDS FOCUSING ON PROCESS SAFETY AND INTEGRITY OF AN IDEAL PUMPING SYSTEMS</b> T. Portela / Vale 11:00 – 11:30 / Room 2	(P)	<b>DEVELOPMENT AND APPLICATION OF PROCESS SAFETY COMPETENCY FRAMEWORK IN AGROINDUSTRY – CASE STUDY</b> D. Revez and G. Peron / Cargill 11:00 – 11:30 / Room 3

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# TECHNICAL PRESENTATIONS

## THURSDAY, OCTOBER 20, 2022 (CONTINUED)

PROCESS SAFETY CULTURE II CHAIR: JULIAN CAMARGO (ECOPETROL)		BARRIER MANAGEMENT AND PROTECTIVE SYSTEMS II CHAIR: MARCO LIMA (BRASKEM)		CASE STUDIES ACROSS INDUSTRIES III CHAIR: ROBERTO RUIZ (PSRG)	
(S)	<b>MITOS Y REALIDADES SOBRE EL INVOLUCRAMIENTO DE LOS GRUPOS DE INTERES</b> N. Sposito Sr. / PPR Consulting 12:30 – 13:00 / Room 1	(P)	<b>SAFETY INTEGRITY LEVEL (SIL) APPLIED TO THE BELT CONVEYOR DESIGN</b> H. Guedes Sr. / Vale 12:30 – 13:00 / Room 2	(P)	<b>BRASKEM'S FACILITY SITING STUDIES AND METHODOLOGY</b> T. Novo / Braskem 12:30 – 13:00 / Room 3
(S)	<b>LA CULTURA EN SEGURIDAD DE PROCESOS EN ESTACIONES DE SERVICIO</b> S. Frites and M. Alcoba / YPF 13:00 – 13:30 / Room 1	(P)	<b>MONITORING AND REPORTING OPERATIONAL RISKS ASSOCIATED WITH DAM SAFETY BASED ON THE BOW TIE METHODOLOGY</b> D. Alves, C. F. Oliveira, S. Marsal, R. Souza, and L. P. Carvalho Fonseca / Petrobras 13:00 – 13:30 / Room 2	(P)	<b>ESTUDO DA APLICAÇÃO DA METODOLOGIA QUALITATIVA HAZOP NOSISTEMA DE INJEÇÃO DE VAPOR EM UMA INSTALAÇÃO DE OLÉO EGÁS</b> A. Diniz, R. Resplande, L. Magalhães, W. Dias, A. Vilela, and L. Assumpção / RSE 13:00 – 13:30 / Room 3
(S)	<b>DESARROLLO DE CURVAS DE SEVERIDAD EN ACTIVIDADES DEL OIL&amp;GAS Y ANALISIS DEL PUNTO DE INFLEXION DE LA CULTURA DE SEGURIDAD EN LATAM</b> C. Puma / UNNA Energia 13:30 – 14:00 / Room 1	(E)	<b>DYNAMIC PROCESS SAFETY MANAGEMENT</b> F. Bongiorno Arasanz and F. M. de Lima / Schneider Electric Process Automation 13:30 – 14:00 / Room 2	(P)	<b>PRV EVALUATION DUE TO MANUFACTURER RECALL AND ITS IMPACT IN AN OIL&amp;GAS INDUSTRY</b> N. Marques and K. Saito / Petrobras 13:30 – 14:00 / Room 3
(S)	<b>MARCO DE INTEGRACIÓN DE JÓVENES PROFESIONALES EN GESTIÓN DE SEGURIDAD DE PROCESOS, BASADO EN LOS PRINCIPIOS DE LEAN</b> E. Mendoza Vega / Corporación SE 14:00 – 14:30 / Room 1	(P)	<b>BARRIER MANAGEMENT MONITORING SYSTEM</b> M. Sousa, and A. Dos Santos Teixeira / Braskem 14:00 – 14:30 / Room 2	(P)	<b>CLASSIFICAÇÃO DE EVENTOS DE SEGURANÇA DE PROCESSO (PSE – PROCESS SAFETY EVENT) ATRAVÉS DO CÁLCULO DE TAXA DE DESCARGA USANDO FLUIDODINÂMICA COMPUTACIONAL (CFD – COMPUTACIONAL FLUID DYNAMICS)</b> K. A. Schenkel / Braskem 14:00 – 14:30 / Room 3

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