

Electrical, Automation and Digitization Knowledge Sharing Event

Partners





















Conference site:

FAST | Federazione delle Associazioni Scientifiche e Tecniche Piazzale Rodolfo Morandi, 2 20121 Milano Italy

Executive & Technical Program Committee

Florent Baldeck, WEG (F), Executive Committee Chair & Middle East Local Committee Chairman Jeremy Andrews, Siemens (UK), Secretary & Executive Committee Vice-Chair Jan Verstraten, Dow (NL), Treasurer Paul Donnellan, Shell (NL), Executive Committee Vice Chair, Technical Committee Chair Diedrich Thaden, Thaden Project Consulting (D), Vice Chair Automation Technical Chair Cécile Gaudeaux, Air Liquide (F), Vice Chair Tutorials Caroline Bishop, Exertherm (UK), Vice Chair Sponsors Luigi Bellofatto, IMESA SPA (I), Technical Secretary Kim Fumagalli (I), Assistant Technical Secretary Norman Blume, Wintershall Dea (D), Marketing Chair & **Assistant Technical Committee** Caroline Vollet, Schneider Electric (F) Philippe Angays, Technip Energies (F) Ben Johnson, Thermon (USA) Allen Gibson, Cape Industries (USA) Bruno Leforgeais, TotalEnergies (F) Edouard Thibaut, TotalEnergies (F) Justin Mason, Trydanol Energy Solutions (UK) Bert Engbers, ABB (NL) Chris Thomason, (UK) Jean Guilhem, 2B1st Consulting (F) Dibyendu Bhattacharya, BP (UK)

Supervisory Board

Thomas Schmidtchen, ABB (USA)

Jean-Charles Guilhem, 2B1st Consulting (F), Supervisory Board Chair Patrick Leroux, Retired from Total (F), Supervisory Board Vice-Chair Peter Pieters, Sabic (NL)

Local Committee

Jean Guilhem, 2B1st Consulting (F) Caroline Bishop, Exertherm (UK) Kim Fumagalli, (I) Luigi Bellofato, IMESA SPA (I) Thibaut Jouvet, Théra (F)



PCIC energy Europe Mission

To provide an international forum in the heart of the major source of petroleum products for the exchange of electrical and instrumentation applications technology relating to the petroleum and chemical industry, to sponsor appropriate standards activity for that industry, and to provide opportunity for professional development.

PCIC energy Europe Strategies

- 1. The PCIC energy Europe Annual Conference will be held in locations of industry strength, and its location will be rotated annually in an effort to attract national and international participation.
- 2. PCIC energy Europe will proactively promote participation by a broad base of PCIC energy Europe representatives, with an emphasis on both younger and senior engineers.
- 3. Attendees will be encouraged to participate in technical activities including authorship of papers and participation in IEC standards development including IECEx.
- 4. The quality of PCIC energy Europe papers is essential for the PCIC energy Europe mission and is given highest priority. Application oriented papers are given priority.
- 5. The technical content of the PCIC energy Europe Annual Conference will be continuously evaluated and updated to reflect the evolving needs of the industry.
- 6. Participation of users, manufacturers, consultants and contractors will be encouraged in the activities of PCIC energy Europe to strengthen the conference technical base.
- 7. PCIC energy Europe will offer tutorials directed towards enhancing the technical, communication, and interpersonal skills of petroleum and chemical industry engineers.



PCIC energy Europe 2023 Conference would like to thank its sponsors (list updated on March 15th, 2023)

Platinum Sponsors











Silver Sponsors















Welcome from the Local Committee

On behalf of PCIC energy, I have the chance to organize next Europe conference in Milan, Italie.

Known for being a fashion, artistic and architectural capital, Milano is also the heart of the Italian Industry and its energy companies.

On June 2023, the entire PCIC energy organization will have the pleasure to organize 3 days of conference.

Centered around a rich technical program, you will also have the chance to discover Milan famous must see : the Duomo, la Galleria Vittorio Emanuele II, Leonardo Di Vinci's Last Supper and many wonders.

Social events will also be the occasion to exchange with all the most prominent experts of the industry in Electricity, Automation and Digital.

Last but not least, it will be your chance to taste the traditional Italian dish or wine, and thus try the Dolce Vita.

On behalf of the local committee, I wish you a very interesting and profitable PCIC energy Europe conference and we will do our best to make your visit to Milan enjoyable.

Have a wonderful stay in Milan.

Jean Guilhem, PCIC energy Executive Committee member

Local Committee members: Jean Guilhem, Caroline Bishop, Kim Fumagalli, Luigi Bellofato, Thibaut Jouvet



Provisional Schedule at a Glance

Monday June 5th, 2023

Time	
18:00 - 21:00	Registration at welcome desk

Tuesday June 6th, 2023

Time 08:30 - 09:30	Room 1	Room 2	
09:30 - 09:45	Registration, Welcome Coffee Safety Briefing & Welcome and notices		
09:45 - 11:15	Tutorial 1 EUR23_XX - Recommended practices for electrification of oil and gas facilities		
11:15 - 11:45	Coffee Break / Sponsors tables		
11:45 - 13:15	Tutorial 2 EUR23_XX - Replacing of Electrical Submersible Pump (ESP) Systems under offshore condition		
13:15 – 14:30	Lunch		
14:30 – 15:15	Paper 01 EUR23_02 - Shunt reactor compensation for subsea cables in industrial plants	Paper 02 EUR23_XX - Conceptual electrical designs & total control system concept for Green Hydrogen	
15:15 – 16:00	Paper 03 EUR23_XX - ReX and Recommendations for Mechanical Integration of Large High-Speed Motors	Paper 04 EUR23_13 - Hydrogen for Electricity: Technical and Normative Preliminary Analysis	
16:00 – 16:30	Coffee Break / Sponsors tables		
16:30 – 17:15	Paper 05 EUR23_16 - VSD Output Voltage Online Compensation for Proper Adjustment of ESP at the Best	Paper 06 EUR23_08 - Environmental Sustainability with Synchronous Transfer on Medium Voltage Drives	
19:00 - 20:00	Networking Event in Mannin Hotel		
20:00	Hospitality suites are open in Mannin Hotel		

Technology & Innovation / Sustainability / Automation & Digitalization / Maintenance & Reliability



Wednesday June 7th, 2023

Time	Room 1	Room 2	
08:30 - 9:15	Paper 07 EUR23_04 - Variable shunt reactors control scheme for interconnected offshore facilities	Paper 08 EUR22_XX - Developing SF6 free products with alternative gas	
09:15 - 10:00	Paper 09 EUR23_17 - Is process electrification a straightforward approach?	Paper 10 EUR23_XX - Decarbonization of offshore installations using converters with active front end	
10:00 - 10:30	Coffee / Sponsor tables		
10:30 - 11:15	Paper 11 EUR23_XX - Coldflow in soft-bedded cables- busting some myths and a new solution	Paper 12 EUR23_09 - Electrical Engineering Challenges and Opportunities in EV charging	
11:15 - 12:00	Paper 13 EUR23_XX - Improved ride though of VFD connected to overhead lines	Paper 14 EUR23_XX - Energy transition by Hydrogen gas does also mean transition of the standards?	
12:00 - 13:00	Lunch		
13:00 - 13:45	Paper 15 EUR23_06 - A study on the effects of grid faults on the grid connected oil & gas terminal	Paper 16 EUR23_XX - Digital Solution Construction for Asset Monitoring, the Dual Strategy Importance	
13:45 - 14:30	Paper 17 EUR23_XX - Large Motor Starting with Flux Compensated Magnetic Amplifier	Paper 18 EUR23_XX - Rackon-X®: The First Rack & Pinion actuator with Data-Tracking Unit	
14:30 - 15:00	Coffee / Sponsor tables		
15:00 - 15:45	Paper 19 EUR23_XX - Evaluation of Power Quality Characteristics in Electric Submersible Pumps	Paper 20 EUR23_10 - Use of Virtual for Training on Electric Motor Condition Monitoring	
15:45 - 16:30	Paper 21 EUR23_XX - End winding resonance, Should be order or not	Paper 22 EUR23_11 - Digital Project Execution - Optimizing Your Assets	
16:00 – 0:00	Hospitality suites are open		

Technology & Innovation / Sustainability / Automation & Digitalization / Maintenance & Reliability



Thursday June 8th, 2023

Time	Tower 2	Tower 3
08:30 - 09:15	Paper 23 EUR23_01 - FMEA during Project FEED to ensure high availability - VSD system as use case	Paper 24 EUR23_19 - Digitalized Condition Monitoring and Health Management System for Electric Motor
09:15 - 10:00	Paper 25 EUR23_XX - The Importance of Transformer Through Fault Monitoring	Paper 26 EUR23_03 - Study of Subsea, Onshore and Offshore Electric Generation, Distribution and Transmission
10:00 - 10:30	Coffee / Sponsor tables	
10:30 - 11:15	Paper 27 EUR23_XX - The effect of Harmonics on Ground Fault Protection	Paper 28 EUR23_XX - Condition monitoring of Variable Speed Drives
11:15 - 12:00	Paper 29 EUR23_12 - Electric Power System Topology For High Capacity All-Electric FPSO	
12:00 - 12:45	Paper 30 EUR23_07 - Design factors of electrifying brownfield O&G assets	
12:45 - 13:15	Closing words	

Technology & Innovation / Sustainability / Automation & Digitalization / Maintenance & Reliability

PCIC Europe Code of Conduct

1. PCIC Europe missions

The scope of the association is to hold an annual technical conference in Europe in the field of electrical, non-electrical and safety related items in connection with production, treatment and transport of crude oil and related raw materials and products, chemicals and chemical products and products of the Pharmaceutical Industry. The purpose is to share good practices and improve competencies of engineers working in the field of process industries.

2. Purpose of the Code of Conduct European Petroleum and Chemical Industry Committee (PCIC Europe) is a notfor-profit association managed and operated by representatives of the process industry on a voluntary basis. Therefore it can only work from the dedication and commitment of the volunteers in charge. PCIC energy Europe Conferences involve different categories of people: Organizing Committees, Authors, Delegates Sponsors. Each one of these categories has rights and duties to contribute to the success of the conferences. These rights and duties are described in different documents available when someone is joining one of these categories. In any case these documents may be subject to interpretation and cannot claim to be exhaustive. In order to avoid misunderstandings and misleading expectations, this Code of Conduct intends to draw the guidelines to contribute positively to the development of PCIC Europe and eliminate inappropriate

3. Member / Organizing Committees
The members of the different Organizing
Committees are volunteers. Generally their
respective time allocation and costs are
supported by their respective companies.
Therefore the different Organizing
Committees members:

behaviour that could compromise PCIC

Europe missions.

- · Shall register at the conference according to the conference terms and conditions
- · Shall not benefit of any advantage regarding the conferences

- · Shall not use their position in the Organizing Committee to "invite" people or give any advantage to other conference Delegate, Author, Sponsor.
- · Shall not disclose unofficial information from internal documents or discussions to third parties without prior agreement from the organizing committee
- · Shall adhere to anti competition rules as described in paragraph 7

4. Authors

The Authors contribute to the success of the conferences by the quality of their papers and presentations. In compensation they contribute to promote the expertise of their respective company. The PCIC Europe copyright is intended to give permission to PCIC Europe to publish the paper and to use it to promote its Technical Conferences. The copyright also states that the contents of the paper are the sole responsibility of the author(s). Authors retain all rights to the technical contents. Therefore the Authors:

- · Shall register at the conference (as a minimum the presenting author) according to the conference terms and conditions
- · Shall not benefit of any advantage regarding the conferences
- · Shall not use their position to "invite" people or give any advantage to other conference Delegate, Author, Sponsor.
- Shall adhere to competition law code PCIC Europe as described in paragraph 7

5. Sponsors

The Sponsors are essential to the financing of the conferences and PCIC Europe is committed to maximize Sponsors visibility in respect with the sponsorship terms and conditions. PCIC Europe is also welcoming Sponsors initiatives that may contribute to the conference attractiveness within the PCIC Europe commercialism rules and sponsorship terms and conditions. In purchasing a sponsorship, the Sponsors:

- · Shall register their representatives at the conference according to the conference terms and conditions
- · Shall not benefit of any advantage beyond the sponsorship terms and conditions regarding the conferences.

- · Shall not use their position to "invite" people or give any advantage to other conference Delegate, Author, Sponsor.
- · Shall adhere to competition law code PCIC Europe as described in paragraph 7
- 6. Delegates / Conference attendees

The venue of the Delegates is the fundamental goal of PCIC Europe and in that respect all efforts are mobilized to satisfy them. As part of these efforts PCIC Europe is calculating the registration fees fairly in order to maximize the conference attendance. In addition PCIC Europe is welcoming all remarks and suggestions from the Delegates for improving the conferences year to year. In registering at the conference, the Delegates:

- · Shall register at the conference according to the registration terms and conditions
- · Shall not benefit of any advantage beyond the registrations terms and conditions regarding the conferences.
- · Shall not transfer his/her registration to another person
- Shall not use their position to "invite" people or give any advantage to other conference Delegate, Author, Sponsor.
- Shall adhere to competition law code PCIC Europe as described in paragraph 7
- 7. Competition Law Code PCIC Europe All members of and participants to meetings and events of PCIC Europe (collectively "Participants") are held to comply with the prevailing antitrust and competition law rules. For that purpose, each Participant shall:
- · avoid to discuss or share any commercial and/or strategic company information, including information about prices, profit margins or costs, bids, offerings, market share, distribution practices, terms of sales, specific customers or vendors
- · avoid to engage in any agreements formal or otherwise to fix or set prices or
 allocate products, markets, territories or
 customers; Participants will ensure that
 meetings and conferences are preceded by
 an agenda listing legitimate topics and are
 followed by minutes in compliance with
 antitrust and competition law rules.
 Participants agree not to exchange any
 commercially sensitive or company
 strategic information during any formal and

informal PCIC Europe gathering. Non-compliance with this Competition Law Code may, at the discretion of the PCIC Europe Executive Committee, result into the withdrawal of PCIC Europe membership and exclusion from PCIC Europe's activities.

8. Freedom from Commercialism

The technical papers, tutorials and poster and related presentations will be free from commercialism by all authors whether affiliated with manufacturers, users, or contractors. It is acceptable to present valid technical data. It is not acceptable to show company logos, use company names, use trade names, use trademarks, use facility names, or use facility locations. This applies to written paper, the presentation file, and to the contents of the oral presentation. Company names may only be used together with the authors' names and email addresses at the start of the paper and the first slide of the presentation file. They may not be included anywhere else in presentation file. includina information band in the bottom of the slides. During question and answer sessions, participants shall refrain from asking any commercial questions. The PCIC Europe appointed session chair shall stop any discussions that contain commercial Sponsors shall confine content. commercialism at the conference within the limits agreed with PCIC Europe.

9. Closing remark

This code of conduct is required to be accepted by:

- · authors and presenters, during the paper submission process,
- · conference attendees, when registering
- · sponsors, when accepting PCIC Europe sponsor quotation
- · committee members, before the General Assembly accepts their nomination



NOTES