


Next Generation ELECTROLYSERS NORTH AMERICA

International Summit
Dallas/Forth Worth, TX, USA | June 21-22, 2023

Sponsor:  AMES GOLDSMITH™ CEIMIG  Hydrogen is now HTEC SYSTEMS

We would like to thank speakers & guests of our current and previous electrolysis conferences:





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The **deployment of large-scale electrolyzers** is the **key technological element for the decarbonisation of central industrial and transport sectors**. The existing electrolyser technology is now ready for a massive scale-up. To achieve the ambitious objectives that have been announced recently to accelerate electrolyser installations across the industrial sectors and to significantly reduce the costs of clean hydrogen production, considerable challenges have to be overcome by industrial users of electrolyzers, system manufacturers, providers of components and materials, and other stakeholders within the hydrogen economy.

The time for hydrogen is now.

This summit is to bring together industrial investors, electrolyser experts, engineering specialists and other stakeholders along the value chain to discuss the development, manufacturing, deployment and integration of the next generation of industrial electrolyzers.

Welcome to Next Generation Electrolysers North America!

RedCabin GmbH



THE KEY OBJECTIVES OF THIS SUMMIT

LEARN ...

... how to scale up **electrolyser units**, their different **technologies** and **manufacturing processes**

DISCUSS ...

... how to **increase efficiency and cut costs** by improving electrolyser design, materials and components, and balance of plant (BoP).

EXPLORE ...

... how to **integrate large electrolyzers** into renewable systems, plants, processes and value chains to scale up their industrial application.

ENLARGE ...

... your network with **industry experts** from all parts of the electrolyser value chain and learn from each other.

For further information, sponsorship or delegate registration please contact:

Erutode Rume, erutode.rume@redcabin.de | Office: +49 30 99 40 489 11 | Mobile: +49 162 256 738 2



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EARLY CONFIRMED SPEAKERS AND GUESTS

SUMMIT CHAIRMAN

PROF. BRUNO G. POLLET

President of Green Hydrogen Division of International Association for Hydrogen Energy (IAHE) and current member of the Council of Engineers for the Energy Transition under the auspices of the UN Secretary-General



IAHE
Green Hydrogen
Division

UDAY TURAGA

Founder & CEO
ADI Analytics, USA



DAVID MARTIN

Chief Commercial Officer
H2U Technologies, USA



JOCHEN LOFFLER

Program Manager Electrolysis
TNO, The Netherlands



PEDRO PAJARES

Chief Executive Officer
H2B2 Electrolysis Technologies, USA



SUNITA SATYAPAL

Director, Hydrogen & Fuel Cell Technologies Office
EERE, Department of Energy, USA



OLEKSIY TATARENKO

Senior Principal, Hydrogen Initiatives
RMI, USA



ALEX PANCHULA

Vice President of Product Management
Electric Hydrogen, USA



IVETTE VERA-PEREZ

President & CEO
CHFCA, Canada



ANDREW EMIL

Vice President of Sales
H-TEC SYSTEMS, Germany



EDWART STUART

VP Development
Hydrogen Optimized, Canada



WAYNE THORNHILL

Sales Manager
Ames Goldsmith Ceimig, UK



JESSICA ELWELL

Chief Operating Officer
OxEon Energy, USA



JUSTIN ALBERS

Researcher
Fraunhofer IFAM, Germany



DERMOT GOSSER

New Plant Business Manager,
Sales & BD North America
thyssenkrupp nucera, USA



STÉPHANE MAILLARD

Commercial Director
Elogen, France



MANISH VERMA

Business Development Specialist
TMEIC Corporation Americas, USA



ROXANA BEKEMOHAMMADI

Founder & Executive Director
US Hydrogen Alliance, USA



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SPONSORS



Ames Goldsmith Ceimig manufacture platinum group metal (PGM) based electrocatalysts which are used in PEM Fuel Cells and Electrolysers.

Ames Goldsmith Ceimig is part of Ames Goldsmith Corporation, a leading manufacturer of chemicals based on precious metals with sites in North America, UK and Asia. The HyPer WE range of products for PEM electrolysers include Iridium Black, Iridium Oxide, Iridium Ruthenium Oxide, Supported Iridium, Platinum Black & Platinum on Carbon support. The HyPer FC range of products for PEM Fuel Cells is a comprehensive range of Platinum on Carbon support designed for high durability.



H-TEC SYSTEMS is a hydrogen expert, innovation driver and partner in the energy transition. For our future and for our customers we develop innovative PEM electrolyzers and electrolysis stacks for green hydrogen production. As a technological pioneer, we have been playing a decisive role in shaping hydrogen technology for over 25 years – at two locations in Germany and across all sectors.

We believe that mobility, production, and consumption are possible without emissions. With consideration for future generations and respect for nature. Not someday, with our technology already today.

WHAT YOU WILL EXPERIENCE ON SITE

WHO IS WHO

Get in touch with other experts before the conference starts. Take a look at the business cards and photos while enjoying your first conversational and networking experience.

AUDIENCE Q&A

Interact with conference speakers and moderators to ensure all of your questions are answered during these sessions.

SPEED NETWORKING

Break the ice and get to know your industry peers in these fast-paced one-to-one meetings. Greet each participant in this series of brief exchanges and share your professional background.

PANEL DISCUSSION

Benefit from deeper insights by attending panel discussions. Share your ideas and thoughts with peers and receive feedback from dedicated industry experts in this interactive session.

INTERACTIVE WORKING GROUPS

Get an in-depth approach to these hands-on themes. Discuss, brainstorm, elaborate and work together in this interactive session. Tutorials and workshops are also an excellent chance to interact at this perceived as the, go-to' place for knowledge, best practice and credible solutions.

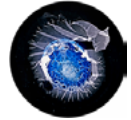
NETWORKING RECEPTION

RedCabin invites our delegates to enjoy an informal evening get-together with speakers and peers. Discuss the outcome of the first summit day and expand your network in a relaxed environment.



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SUMMIT DAY 1 | WEDNESDAY, 21 June 2023

08:20 am REGISTRATION

WHO IS WHO

08:40 am *Get in touch with other experts before the conference starts. Take a look at the business cards and photos while enjoying your first conversational and networking experience.*

09:15 am Welcome Note

Bernd Hamacher – Summit Organizer

Bruno G. Pollet – President of Green Hydrogen Division at IAHE & summit chairman

09:30 am Keynote Presentation

Sunita Satyapal – Director, Hydrogen & Fuel Cell Technologies Office, *EERE, Department of Energy, USA*

10:00 am State of Play of the US Hydrogen Market and Hubs (incl. export potential)

- Progress update on emerging US clean hydrogen hubs and 10mtpa by 2030 target
- Priority sectors for clean hydrogen offtake in the US
- Potential for Transatlantic green hydrogen export-import

Oleksiy Tatarenko – Senior Principal, Hydrogen Initiatives, *RMI, USA*

SPEED NETWORKING

10:30 am *Break the ice and get to know your industry peers in these fast-paced, one-to-one meetings. Greet each attendee in a series of brief exchanges and share your professional background. Make sure you bring a whole stack of business cards with you!*

11:00 am NETWORKING COFFEE BREAK

11:30 am Presentation

Ivette Vera-Perez – President & CEO, *Canadian Hydrogen and Fuel Cell Association*

12:00 pm Presentation

Roxana Bekemohammadi – Founder & Executive Director, *US Hydrogen Alliance, USA*

12:30 pm NETWORKING LUNCH BREAK

01:30 pm Green Hydrogen from large scale AWE Technology

- Bigger is Better...lower costs
- Zero-Gap: a must to lowest energy consumption
- Is there a better cell separator
- Are there better electrode coatings

Dermot Gosser – New Plant Business Manager, Sales & BD North America, *thyssenkrupp nucera, USA*



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SUMMIT DAY 1 | WEDNESDAY, 21 June 2023

INTERACTIVE SESSION: WORKING GROUPS

02:00 pm *The audience will be divided into two groups. Each group will attend each interactive working group within two rotating sessions.*

WORKING GROUP – 1

02:00 pm Proposal for Systematic Modeling Electrolyzers and Hydrogen Systems

Purchasers of Electrolyzer systems need to integrate power, water, wastewater and controls on their site and use the hydrogen for a value-added purpose downstream.

In addition, each system vendor has a slightly different scope and offering. Today, the industry forces the customer to try understand these issues and compare across vendors and technology. This adds additional time and expense to an already lengthy sales cycle.

Questions to be discussed:

- What defines an electrolyzer system that is easily understood?
- Included scope and product configurations?
- The needed customer interfaces including utilities: water, cooling, power product footprint; and controls?
- Hydrogen standard for downstream consumption?
- What metrics for efficiency? Including standard test conditions, stack efficiency vs system efficiency at different power levels, and production rate over time?

Alex Panchula – Vice President of Product Management, Electric Hydrogen, USA

WORKING GROUP – 2

02:00 pm Efforts in the scaling of Ni-based PGM free electrodes for alkaline electrolysis

- Ni based electrodes offer high activity without using critical materials
- Cheap and scalable electrode production is essential for electrolysis on GW scale
- PGM free electrodes offer great scalability but there remain challenges with performance
- Highlighting three projects in different stages off maturity

Justin Albers – Researcher, Fraunhofer IFAM, Germany

03:00 pm NETWORKING COFFEE BREAK

03:30 pm CONTINUING WITH WORKING GROUP 1 & 2

04:30 pm RESULTS

Each moderator of the interactive working group is presenting the outcome of their working group.

05:00 pm CLOSING REMARKS BY SUMMIT CHAIRMAN

Bruno G. Pollet – President of Green Hydrogen Division at IAHE & summit chairman



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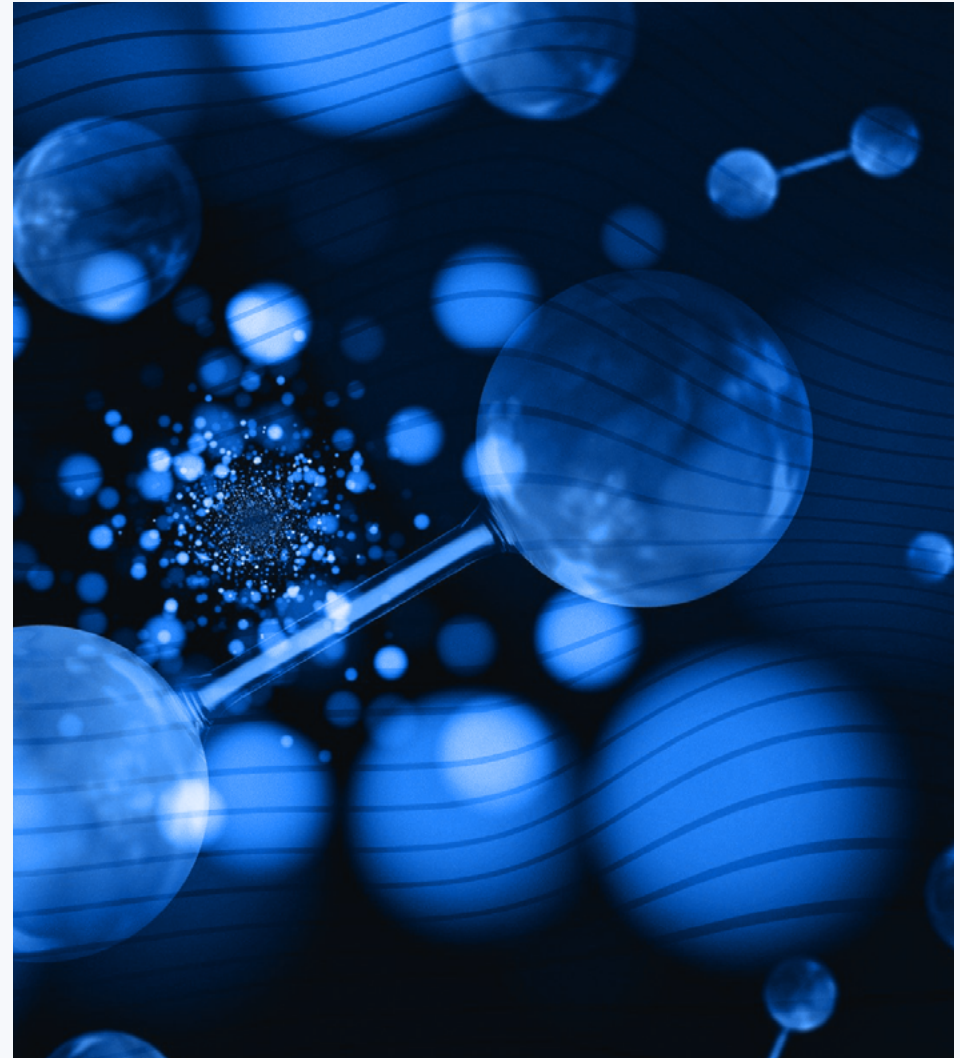


SUMMIT DAY 1 | WEDNESDAY, 21 June 2023

05:30 pm EVENING NETWORKING RECEPTION

Enjoy an informal evening get-together.

END OF SUMMIT DAY 1





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SUMMIT DAY 2 | THURSDAY, 22 June 2023

08:30 am REGISTRATION

09:15 am Welcome Note

Bernd Hamacher – Summit Organizer

Bruno G. Pollet – President of Green Hydrogen Division at IAHE & summit chairman

09:30 am Hydrogen markets in the next five years

- Review key drivers for green and blue hydrogen through the next five years
- Define the major themes for green and blue hydrogen demand in the near/medium term
- Assess the impact of the Inflation Reduction Act and other policies on hydrogen demand
- Evaluate progress in the broader supply chain for hydrogen markets

Uday Turaga – Founder & CEO, ADI ANALYTICS, USA

10:00 am Technical Presentation

Andrew Emil – Vice President of Sales, H-TEC Systems, Germany

10:30 am Low iridium PEM anode catalysis

- Catalysts currently available at scale
- Reasons for low Ir requirement
- Development steps

- New low Ir catalyst
- Technoeconomic effect
- Recycling

Wayne Thornhill – Sales Manager, Ames Goldsmith Ceimig, United Kingdom

11:00 am NETWORKING COFFEE BREAK

11:30 am Next Generation PEM Electrolyser Technology

- Technology generations and challenges
- Update on technology development reducing Ir by up to 200x
- Outlook: further 3rd generation electrolyser innovations

Jochen Loffler – Program Manager Electrolysis, TNO, The Netherlands

12:00 pm Catalyzing the Hydrogen Economy

- A more sustainable approach to water electrolyzers
- Change the assumptions and reduce the cost of equipment
- Catalysts are key to the future

David Martin – Chief Commercial Officer, H2U Technologies, USA



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SUMMIT DAY 2 | THURSDAY, 22 June 2023

12:30 pm NETWORKING LUNCH BREAK

01:30 pm SoHyCal, green hydrogen generation behind the meter

- H2B2, PEM electrolyzer manufacturer and project promoter
- Use of the greenest energy available: biogas engine and photovoltaic solar farm
- Location. Bridging the gap between major population centers: LA - Bay area corridor

Pedro Pajares – Chief Executive Officer, *H2B2 Electrolysis Technologies, USA*

02:00 pm Scaling up green hydrogen production, a PEM electrolysis perspective:

- Initiatives to ramp-up electrolysis capacity
- Key developments in PEM
- Innovative applications to develop green H2

Stéphane Maillard – Commercial Director, *Elogen, France*

02:30 pm NETWORKING COFFEE BREAK

03:00 pm RuggedCell™ Water Electrolysis: Advancing proven technology to deliver the lowest levelized cost of hydrogen

Large-scale clean hydrogen production for hard-to-abate major industries is essential for the global energy transition. To achieve this, large-scale water electrolyzer design must pair seamlessly with variable power renewables; incorporate readily

available and affordable raw materials; and enable low-cost, less frequent on-site maintenance. This presentation will shed light on these key variables and how they impact the levelized cost of hydrogen (LCOH). It will also contrast the success factors required for gigawatt-scale electrolysis to materially impact global carbon emissions with historic electrolyzer market requirements.

Edward Stuart – VP Development, *Hydrogen Optimized, Canada*

03:30 pm Overview of Solid Oxide Applications at OxEon Energy

- Overview of OxEon Energy
- Terrestrial Applications for Fuel and Power Generation
- Enabling Space Exploration with Solid Oxide

Jessica Elwell – Chief Operating Officer, *OxEon Energy, USA*

04:00 pm Unleashing the Power Trifecta: How cost, efficiency and performance impact Rectifier technology selection?

- Cost considerations: Explore how the rectifier technology influences CAPEX, OPEX and tradeoffs.
- Efficiency implications: Investigate the impact of efficiency on overall energy consumption.
- Performance factors: Examine over relevant factors that dictate utility side and electrolyzer side performance.

Manish Verma – Business development Specialist, *TMEIC Corporation Americas, USA*



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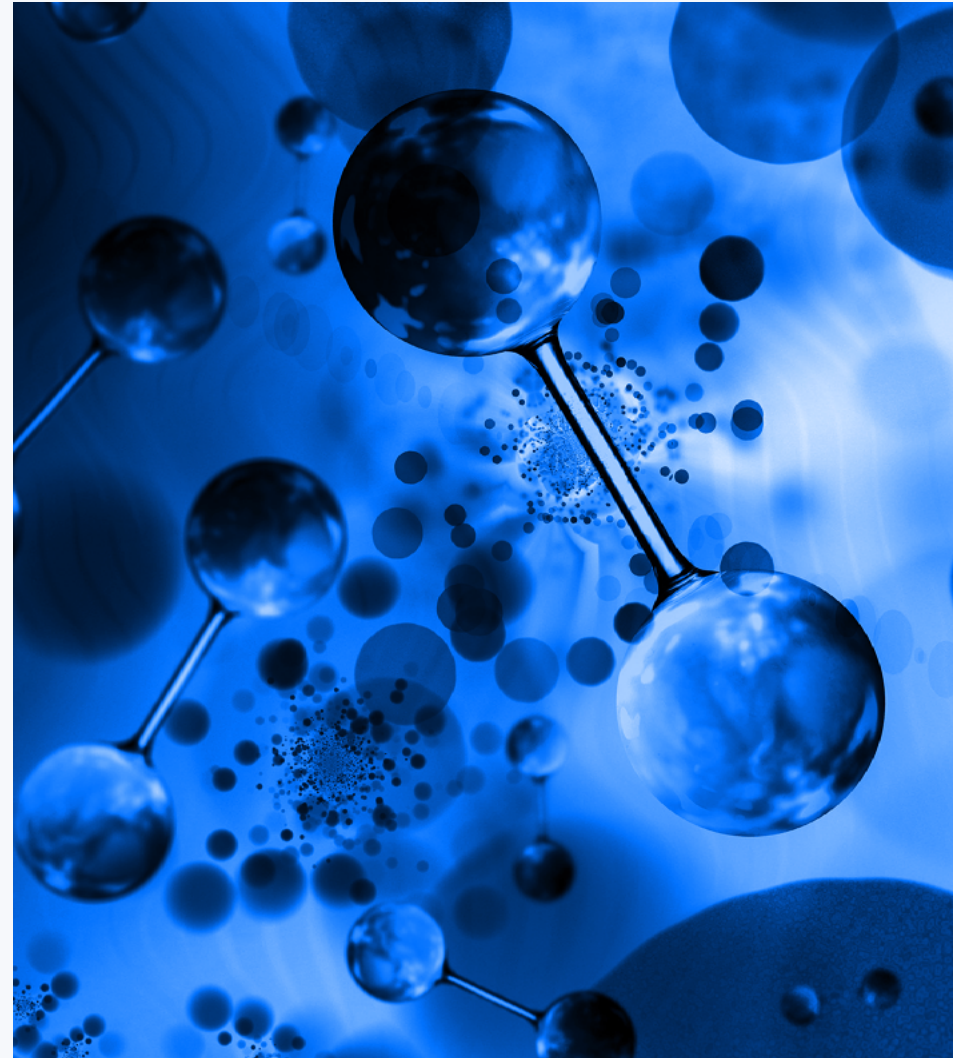


SUMMIT DAY 2 | THURSDAY, 22 June 2023

04:30 pm CLOSING REMARKS BY SUMMIT CHAIRPERSON

Bruno G. Pollet – President of Green Hydrogen Division at IAHE & summit chairman

04:45 pm END OF SUMMIT





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INVESTMENT PER DELEGATE

DATE	2 DAY CONFERENCE INVESTEMENT
ORIGINAL INVESTMENT	2.895 €

SUMMIT VENUE

Radisson Hotel, Fort Worth North at Fossil Creek

2540 Meacham Boulevard, Fort Worth,
Texas, 76106, USA

[CLICK HERE FOR BOOKING](#) | Booking Code: RedCabin

PARTNER HOTEL

SpringHill Suites Fossil Creek

5301 North Riverside Drive, Fort Worth,
Texas, 76106, USA

FOR FURTHER INFORMATION, SPONSORSHIP OR DELEGATE REGISTRATION PLEASE CONTACT:

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