



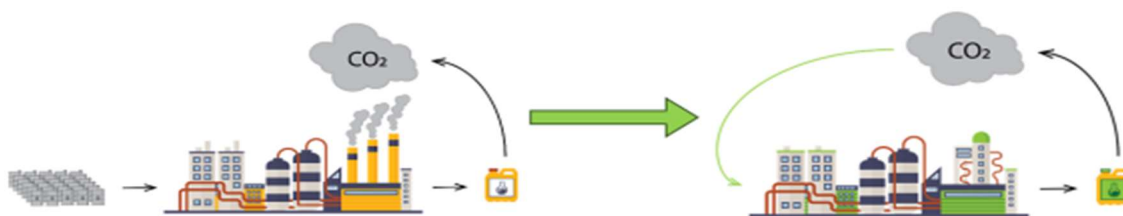
*virtu*AIChE®

This month's meeting:

*Primary (with live discussion/live chat) Wednesday, October 26 at 9 pm ET (US) / 1 am GMT
Alternate 1 (with live discussion/live chat) Thursday, October 27 at 7 am ET (US) / 11 am GMT
Alternate 2 (with live discussion/live chat) Thursday, October 27 at 1 pm ET (US) / 5 pm GMT*

DECARBONIZATION OF CHEMICAL MANUFACTURING BY CO₂ ELECTROLYSIS

By: Magda Barecka



This talk will focus on how to introduce CO₂ electrolysis into established industries and allow for their full-scale decarbonization. Following a brief introduction of state-of-the-art CO₂ electrolysis, I will discuss several strategies for its stepwise deployment in chemical plants, without disrupting the existing industries and therefore not putting at risk the delivery of products that our society relies on. Proposed strategies will be illustrated with specific examples of chemical plants and techno-economic analyses for the integrated processes.



Magda H. Barecka is an Assistant Professor at Northeastern University (Boston). Her group focuses on discovery and optimization of processes to scale decarbonization technologies. Magda holds a PhD degree from Technical University Dortmund in Germany and gained experience in process development both in industry (Switzerland, France) and academia (Singapore).

***Note that registration for VLS meetings is required.
Our meetings are still free to attend and open to all.***

October Meeting Registration Information

Primary
(Live Presentation/Live Chat)
October 26 at 9 PM EST / 1 AM
GMT
Register in advance for the
[Primary Meeting](#)

Alternate 1
(Recorded Presentation/Live Chat)
October 27 at 7 AM EST / 10 AM GMT
Register in advance for the
[Alternate 1 Meeting](#)

Alternate 2
(Recorded Presentation/Live Chat)
October 27 at 1 PM EST / 5 PM
GMT
Register in advance for the
[Alternate 2 Meeting](#)

After registering, you will receive a confirmation email containing instructions for joining the meeting, along with add-to-calendar links.

AIChE News

The AIChE hosts technical conferences around the world. Check www.aiche.org/conferences for registration and presentation information for this year's events.

Dates	Event
Oct 17-19	2022 DIERS Fall Meeting
Oct 18-20	9 th CCPS Latin American Conference on Process Safety
Oct 19-20	SPE/AIChE Workshop: Flow Assurance Best Practices for Today, Challenges for the Future
Oct 26-28	4 th Battery and Energy Storage Conference
Oct 27-29	6 th International Conference on Epigenetics and Bioengineering
Oct 31 – Nov 2	5 th International Conference on CRISPR Technologies
Nov 1	CCPS Pharma, Food, and Fine Chemicals Workshop – Dust Hazard Analysis
Nov 2-3	November 2022 TSC Meeting
Nov 7-9	2022 Industry 4.0: Digital Transformation Conference (IDTC22)
Nov 13-18	2022 AIChE Annual Meeting
Nov 13-18	RAPID@2022 Annual
Nov 29	CCPS South East Asia Members Meeting

Upcoming VLS Meetings

The VLS has monthly meetings. The following meetings have firm dates and speakers.

Dates	Topic
Oct 26-27 2022	Decarbonization of chemical manufacturing by CO ₂ electrolysis
Nov 16-17 2022	Modeling and Digital Twins for Process Development
Dec 14-15 2022	Holiday Social
Jan 25-26 2023	Process Modeling of Adsorption Processes
Feb 22-23 2023	Student Competition
Mar 22-23 2023	Alternatives to Toxic Substances

Past VLS Meetings

The VLS records its monthly meetings and archives them on the AIChE Academy website in case you missed a meeting or are looking for a particular topic. See below for current recordings. To view a recording as a VLS member, click on the link to go to the recording. Checkout and use the "Purchase with Money" option. The cost should show as \$0.00. Purchase the recording.

Date	Event
Jul 2022	The TurboPy Approach to Learning Python
Jun 2022	Automation Cybersecurity: Connectivity's Double-Edged Sword
May 2022	Evaluating our Assumptions: The Need for Diverse Perspectives

Date	Event
Apr 2022	<u>Lessons on Incident Investigations</u>
Mar 2022	<u>Converting CO₂ into useful products?? What's up with that??</u>
Feb 2022	<u>2022 Student Co-Op and Internship Competition hosted by Noah Meeks</u>
Jan 2022	<u>Biomimicry: Green Chemistry Innovations Inspired by Nature</u>
Nov 2021	<u>Reimagining Energy and the Case for Greening Companies</u>
Oct 2021	<u>Don't Wake Sleeping Dragons: Managing Often-Overlooked Ignition Hazards</u>
Sep 2021	<u>Beyond Unconscious Bias Training: What Works?</u>
Aug 2021	<u>How can nuclear energy help fight climate change?</u>
Jul 2021	<u>Automation of Process Simulation and Data Analytics with MATLAB</u>
Jun 2021	<u>Chemical Fuels in Carbon Neutral Energy system</u>
Apr 2021	<u>Impactful Online Meetings</u>
Mar 2021	<u>AI Deployment in Refinery Operations</u>
Feb 2021	<u>Overcoming the Challenge of Applying Chemical Engineering Principles to the Art of Winemaking</u>
Jan 2021	<u>DIERS Technology Fundamentals II: VLS January 2021 Webinar</u>
Nov 2020	<u>Protecting Lives and Livelihood: Hazardous Materials Classification and its Impact to the Supply Chain</u>
Oct 2020	<u>Chemical Safety Board (CSB) Accidental Release Reporting Rule</u>
Sep 2020	<u>Internships and Undergraduate Education</u>
Aug 2020	<u>Physical Property Models to Design Better Chemical Products</u>
Jul 2020	<u>Julia - A Fresh Approach to Technical Computing</u>
Jun 2020	<u>The Next Digital Leap to AI (An Interactive Webinar)</u>
May 2020	<u>Challenges and Benefits of Remote Operator Training using Cloud-Deployed High-Fidelity, First-Principles Based Standard Operator Training Simulators (SOTS)</u>
Apr 2020	<u>NASEM Chemical Engineering in the 21st Century Study: Give your input!</u>
Mar 2020	<u>Is Your Focus Your Magic!</u>
Feb 2020	<u>DIERS data/standards in HAZOPS of two phase flow</u>
Jan 2020	<u>A Brief History of Measurement</u>
Nov 2019	<u>Using Thermal Imaging to Guard Industrial Facilities</u>
Oct 2019	<u>Python for chemical engineers: Getting started</u>
Aug 2019	<u>Reactive Chemical Hazards</u>
Jul 2019	<u>Should I Py or Should I Fortran?</u>
Jun 2019	<u>Design Considerations for Organic Electronic Materials and Devices</u>
May 2019	<u>Why Can't You Compete Without Virtual/Augmented Reality in Your Plant</u>
Apr 2019	<u>The Chemistry of Bourbon: The "spirit" of molecules</u>
Mar 2019	<u>Demystifying Professional Engineering Licensure and How to Put it to Work for you</u>
Feb 2019	<u>Municipal Wastewater and Sludge Are a Resource, Not a Waste: Coping with Tightening Water Supplies and Limited Landfill Availability</u>

The Virtual Local Section's Executive Committee

Officers

Chair:	Steve Treese
Senior Vice Chair:	open
Vice Chair:	Hashim Al Hajji
Immediate Past Chair:	Paul Adamson
Secretary:	Laura Gimpelson
Acting Treasurer:	Kirsten Rosselot

Directors

Member Care	Fred Fischl
Programming	Kirsten Rosselot
Newsletter	Shannon Brown
Member Feedback	Andrew Riederer
Publicity/Website	Paul Wissmann
Student Competition	Marc Clithero

Did You Know?

You can visit [the VLS website](#) for more information on the Virtual Local Section's mission, activities, and membership. Also at this website, AIChE student members and VLS members can watch previous webinars for free.

We're in this Together

The ongoing COVID-19 situation has provided us with a reminder that even in uncertain times, AIChE is a diverse community of people who lead, create, inspire and learn—together. AIChE is here to help. Knowing that many of our members are working virtually, AIChE has created this page to act as a hub for online content, access to communities, and communication updates. [Learn more.](#)

Subscription Information

Current fully paid members of the Virtual Local Section receive this newsletter. If you wish to update your email address, contact the AIChE's New York Office for Permanent Address Corrections at xpress@aiche.org or 1-800-242-4363.

Continuing Education Credits

Members of AIChE can receive 1 hour of continuing education/professional development credit for attending Virtual Local Section webinars. Send your name, the certificate number on your professional engineer's license, and the licensing entity (state or country) in which you are licensed to our Secretary, lg_environmental@bellsouth.net, to receive one hour of continuing education credit for attending this meeting.