

#### This month's meeting:

Primary (with live discussion/live chat) Wednesday, October 25 at 9 pm ET (US) / 1 am GMT Alternate 1 (with live discussion/live chat) Thursday, October 26 at 7 am ET (US) / 11 am GMT Alternate 2 (with live discussion/live chat) Thursday, October 26 at 1 pm ET (US) / 5 pm GMT

# Student Co-op and Internship Presentation Competition

hosted by Marc Clithero

AIChE's Virtual Local Section is sponsoring the 2023 Student Co-op and Internship Presentation Competition at our October meeting. Top undergraduate student co-ops and interns will discuss their exciting work at this special Virtual Local Section event. The four finalists were chosen from among a pool of student competition applicants. Each finalist will have up to 10 minutes to present the results of their summer or co-op project and answer questions from our live audience. Members of the Virtual Local Section leadership will serve as judges. Marc Clithero, the host for the competition, will announce the winners after the Alternate 2 meeting and the judges have submitted their evaluations. Prizes will be awarded: \$500 1st place • \$300 2nd place • \$200 3rd place(s)!

## All VLS meetings are <u>free to attend</u> and <u>open to all</u>, but <u>registration is required</u>. October Meeting Registration Information

#### **Primary**

(Live Presentation/Live Chat)
October 25 at 9 PM ET (US)/ 1 AM
GMT

Register in advance for the Primary Meeting

#### Alternate 1

(Recorded Presentation/Live Chat) October 26 at 7 AM ET (US) / 11 AM GMT

> Register in advance for the Alternate 1 Meeting

#### Alternate 2

(Recorded Presentation/Live Chat)
October 26 at 1 PM ET (US) / 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.







## **Student Co-op and Internship Competition Presenters**

Name: Poh

**University:** Universiti Teknologi PETRONAS, Seri Iskandar, Perak, Malaysia

Project title: Dosing Optimization of BOE for Wet

**Etching Process** 

#### **Project summary:**

Optimizing dosing frequency of

buffered oxide etch (BOE) used for solar wafer etching by applying knowledge about process engineering, statistical process control and data analytics.

https://www.linkedin.com/in/poh-ching-hong/

Mentor's name: Efrelie Watt

Mentor's university: Maxeon Solar Technologies

Name: Sara Ahmad

**University: Brigham Young** 

University

Project title: Efficiency through CIP System Optimization and Profitable **Recycling Initiatives** 

Project summary: I optimized a non-dairy CIP wash system, saving 1500 gallons and 600 minutes weekly. I also used Seeq and SCADA for data analysis and initiated a recycling program with potential \$320,000/year savings

Mentor: Josh Lynard

Mentor's company: Chobani

Name: Alex

**University:** Oregon State

University

Project title: Gas Monitoring

System

Project summary: I developed and implemented a remote monitoring system for gas cylinders that feed tools inside

the wafer fab. The monitoring system is equipped with many safety mechanisms, data upload for live viewing of cylinder pressure, and the ability to shut down tools in case of low gas delivery pressure. My project was constructed using PLCs coded with ladder logic, HMI screens, and I/O modules.

https://www.linkedin.com/in/alex-moga-5b308a207

Mentor's name: Lars Kemppainen Mentor's company: Analog Devices

Name: Jyotisman Rath

**University:** Institute of Chemical Technology IOC Bhubaneswar, Odisha, India

Project title: Engineering of metal foils (Ni) using laser ablation (ULPING) for catalytic hydrogen production

**Project summary:** Moving

away from conventional approaches for materials synthesis, the objective of this study was to establish the use of pulsed laser in the synthesis of nanostructured materials for efficient hydrogen production.

https://www.linkedin.com/in/jrath2001

Mentor: Dr. Amirkianoosh Kiani

Mentor's university: Ontario Tech University, Oshawa

Ontario, Canada













## **VLS Membership Survey**

VLS sent out our membership annual survey on October 15 so please check your email.

We do need your feedback to build on what is working well within VLS and also where we can improve.

### **VLS Elections**

Elections are coming! Elections are coming! Look for the ballot in your email and please vote as we look to the coming year to staff up our Executive Committee.

### **AIChE News**

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

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Dates	Event	
Oct 22-24	2023 AfroBiotech Conference	
Oct 24-25	2023 Global Conference on Process Safety and Big Data	
Oct 24-25	2023 Diversity and Equity Accelerator through Learning for Startups	
Oct 24-26	2023 OTC Brazil	
Nov 5-10	2023 AIChE Annual Meeting	
Nov 8-9	November 2023 TSC Meeting	
Nov 15-17	2 <sup>nd</sup> Cell Free Systems Conference	
Nov 15-17	5 <sup>th</sup> Battery and Energy Storage Conference	
Nov 27-29	7 <sup>th</sup> CCPS Global Summit on Process Safety	
Nov 27-30	ChemE Show	

## **Upcoming VLS Meetings**

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

Dates	Topic	
Oct 25-26	Student Competition	
Nov 15-16	The Zap Energy Approach to Commercial Fusion	
Dec 13-14	Holiday Social	
Jan 24-25	Proposed Process Safety Management Changes	
Feb 28-29	PFAS Regulations and Water Providers	

## **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
Sep 2023	Language is the Future of Chemistry
Aug 2023	How to Commercialize Innovative Ideas
Jul 2023	Creating a Sustainable Lifecycle for Chemical Manufacturing Plants
Jun 2023	LA100 Roadmap: LA's Path to 100% Carbon Free Energy by 2035
May 2023	Higher Goals, Lower Emissions: Recharging the Chemical Industry [only until Nov. 2023]
Apr 2023	Engineering Ethics: Challenges for Innovation and Society
Mar 2023	Alternatives to Toxic Substances
Feb 2023	Introduction to an Atmospheric Radiation Model
Jan 2023	Applied Thermodynamics for CO2 Capture
Nov 2022	Modeling and Digital Twins for Process Development
Oct 2022	Decarbonization of Chemical Manufacturing by CO2 Electrolysis
Sep 2022	Anaerobic Digestion: Sustainability through Organic Waste Management
Aug 2022	Boost Green and Sustainable Chemical Development with Al
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
Apr 2022	<u>Lessons on Incident Investigations</u>
Mar 2022	Converting CO <sub>2</sub> into useful products?? What's up with that??
Feb 2022	2022 Student Co-Op and Internship Competition hosted by Noah Meeks
Jan 2022	Biomimicry: Green Chemistry Innovations Inspired by Nature
Nov 2021	Reimagining Energy and the Case for Greening Companies
Oct 2021	Don't Wake Sleeping Dragons: Managing Often-Overlooked Ignition Hazards
earlier	https://www.aiche.org/node/140121/redux-events
meetings	



## The Virtual Local Section's Executive Committee

#### Officers

Chair: Fred Fischl
Senior Vice Chair: Charlie Brown
Vice Chair Pro Tem: Arokiaraj Alphones
Immediate Past Chair: Steve Treese
Secretary: Laura Gimpelson
Treasurer: Jacob Matthews

**Directors** 

Member Care Andrew Riederer
Programming Kirsten Rosselot
Newsletter Shannon Brown
Member Feedback Dhananjay Ghonasgi
Publicity/Website Paul Adamson
Student Competition Marc Clithero

#### Contact info for VLS leadership:

https://www.aiche.org/community/sites/local-sections/virtual-local-section/leadership

#### **Did You Know?**

You can visit <u>the VLS website</u> 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.

## **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 <a href="mailto:xpress@aiche.org">xpress@aiche.org</a> 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, Laura Gimpelson (at lg\_environmental@bellsouth.net), to receive one hour of continuing education credit for attending this meeting.

