

#### This month's meeting:

Primary (with live discussion/live chat) Wednesday, May 27 at 9 pm ET (US) / 1 am GMT Alternate 1 (with live discussion/live chat) Thursday, May 28 at 6 am ET (US) / 10 am GMT Alternate 2 (with live discussion/live chat) Thursday, May 28 at 1 pm ET (US) / 5 pm GMT

# Challenges and Benefits of Remote Operator Training using Cloud-Deployed High-Fidelity, First-Principles Based Standard Operator Training Simulators (SOTS)

Facilitated by
Nathan Leonard, Director of Business Development (Hydrocarbons)
CORYS Inc

Operator Training Simulators (OTS) have long been utilized to improve the skills of an operational workforce, thereby increasing plant performance, improving plant-wide safety, and ultimately increasing company profits through increased throughput and plant availability. Implementing OTS remotely, and quickly can present its own unique set of challenges and benefits.

This presentation focuses on a recent OTS project executed by CORYS for remote training of personnel from multiple refinery sites using high-fidelity, First Principles based standard models and shares technology selection, design features and limitations, challenges, tangible benefits and lessons learned during the implementation of the cloud-deployed SOTS.

Nathan Leonard is Director of Business Development (Hydrocarbons) at CORYS Inc, Houston, Texas. He is a seasoned professional in Oil and Gas projects, ranging from concept to completion. He is committed to providing the highest standard of customer service while producing innovative solutions to project needs.





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



# MONTHLY NEWSLETTER OF THE VIRTUAL LOCAL SECTION OF AICHE MAY 2020 - VOLUME 10, ISSUE 5

#### **May Meeting Registration Information**

#### **Primary**

(Live Discussion/Live Chat)
May 27 at 9 PM EST / 1 AM GMT
Register in advance for the
Primary Meeting

#### Alternate 1

(Live Discussion/Live Chat)
May 28 at 6 AM EST / 10 AM GMT
Register in advance for the
Alternate Meeting

#### Alternate 2

(Live Discussion/Live Chat)
May 28 at 1 PM EST / 5 PM GMT
Register in advance for the
Alternate Meeting

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

# Message from the Chair

By Dan Lambert

I hope you are doing well in dealing with our pandemic. I hope and pray that you, your family, your friends and your neighbors all stay healthy. I've seen a big increase in the number of kids playing outside and I see a lot more people and dogs walking around our neighborhood than I have seen before. But I also know there is a lot of sickness and even death, especially for those with health issues and especially in some big cities.

I really hope you come to the May VLS meeting. And not just so you can take your mind off of COVID-19 but because we think you'll enjoy hearing from Nathan Leonard and Suhas Kkulkarni of Corys Dynamic Simulations.

We had a great meeting in April led by Aaron Sarafinas, with more than 100 of you attending (a VLS record for attendance). Thanks also to Kirsten Rosselot and Paul Wissman for the great work they did in supporting this meeting. If you missed the meeting, check out the recorded meeting that we have archived on our website and The AIChE academy.

In order to increase the security of our meetings (Zoom has had some security issues over the last several months), there are two changes that will impact the meeting these month. First, please update Zoom on your laptop, desktop, tablet or phone to Zoom 5.0 or later. They have made some significant changes to improve Zoom security. We are requiring everyone to register ahead for any meeting that you might be planning to attend. So please register early as you will be provided with a personal link to the meeting. And I'll have Zoom send all meeting attendees the Zoom link the day of the meeting in case you have trouble finding it.

I have to apologize for the volume of email traffic you are getting from us. But it is mostly because we are trying new things. First we are trying to cosponsor the <u>Process Development Symposium</u> by supporting the live streaming of the conference. We sent out a survey to gage the interest and optimum price for the symposium. We sent a survey to help prepare for the April meeting. Plus, I inadvertently sent out an incorrect email and had to follow-up with a correction. So, know that we are trying to minimize the emails and we hope that asking you to register for the meetings will minimize some of the emails you get from us. And we have great feedback from both surveys and I really appreciate your participation in these surveys.

I do appreciate you feedback. If you have any ideas for improvement or if you have ideas for new topics and speakers, please tell me. You can reach me at <a href="mailto:chair-vls@aiche.org">chair-vls@aiche.org</a>. And I hope to see you later in May.



# 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.

# Surviving Self-Quarantine: 3 Tips from an Astronaut

Chemical engineer and astronaut Al Sacco provides sage advice for those currently sheltering in place. Review here.

### Virtual Benefits for AIChE Student Members

Wherever you may find yourself — in your studies, in your career, or in the world — AIChE is an excellent resource for technical information, lifelong education, and training that can help you improve your skills, keep current, and reach your goals in a competitive industry.

For those of you who may find yourself glued to your computer for the next several months, here is a run-down of some of the virtual benefits available to AIChE Student Members included as a benefit of your AIChE undergraduate student membership. Review here

# A Call for PPE in the Fight Against COVID-19

John Vasko shares with us the current ongoing efforts to fight the COVID-19 crisis that is affecting us all. Find how to contribute no matter if you are a student or currently work for a PPE producer. Review here

# **Chemical Engineers Tackle COVID-19**

Learn about the many encouraging ways chemical engineers are stepping up to battle COVID-19. Review here



# **AIChE News**

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

Dates	Event
May 4 – 7	Offshore Technology Conference - Cancelled
May 13	Risk Reduction through Quantitative Risk Assessment
May 18 – 20	6 <sup>th</sup> Conference on Constraint – Based Reconstruction and Analysis (COBRA 2020)
May 20	Digital Reliability 24/7 Real-time Machine Diagnostics
May 27	Computer – Aided Process Intensification: Challenges, Trends and Opportunities
Jun 1 – 3	2020 Virtual Process Development Symposium
Jun 8	CCPS Latin America Regional TSC Meeting
Jun 17	Exploring Electrophoresis Using COMSOL Multiphysics
Jun 22 – 25	2020 Synthetic Biology: Engineering, Evolution & Design (SEED)
Jun 22 – 25	2020 Chemours Sponsored CCPS Faculty Workshop
Jun 29 – Jul 2	Sustainable Packaging Symposium 2020
Jun 29 – 30	NDEW-ChE: National Diversity Equity Workshop for Chemical Engineering
	Academic Leaders

# **Upcoming VLS Meetings**

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

Dates	Topic
May 2020	Challenges and Benefits of Remote Operator Training
June 2020	Al in Engineering
July 2020	Julia Programming Language

# **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.

Date	Event
Apr 2020	NASEM Chemical Engineering in the 21st Century Study: Give your input!
Mar 2020	<u>Is Your Focus Your Magic!</u>
Feb 2020	DIERS data/standards in HAZOPS of two phase flow
Jan 2020	A Brief History of Measurement
Nov 2019	Using Thermal Imaging to Guard Industrial Facilities
Oct 2019	Python for chemical engineers: Getting started
Aug 2019	Reactive Chemical Hazards
Jul 2019	Should I Py or Should I Fortran?
Jun 2019	Design Considerations for Organic Electronic Materials and Devices
May 2019	Why Can't You Compete Without Virtual/Augmented Reality in Your Plant
Apr 2019	The Chemistry of Bourbon: The "spirit" of molecules
Mar 2019	Demystifying Professional Engineering Licensure and How to Put it to Work for you
Feb 2019	Municipal Wastewater and Sludge Are a Resource, Not a Waste: Coping with
	Tightening Water Supplies and Limited Landfill Availability

# The Virtual Local Section's Executive Committee

Officers Directors

Chair: Dan Lambert Member Care Louis Mielke Paul Adamson Senior Vice Chair: **Paul Shuey** Publicity Vice Chair Pro Tem: **Aaron Sarafinas** Newsletter Mario Arredondo Immediate Past Chair: Kirsten Rosselot **Programming Richard Evans** Laura Gimpelson Secretary: Scott Clarke

Treasurer: <u>Jennifer Brand</u> Member Feedback <u>Paul Wissmann</u>

# 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, AlChE 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, to receive one hour of continuing education credit for attending this meeting.

