



*virtu*AIChE®

*This month's meeting:*

*Primary (with live discussion/live chat) Wednesday, Jun 24 at 9 pm ET (US) / 1 am GMT  
Alternate 1 (with live discussion/live chat) Thursday, Jun 25 at 6 am ET (US) / 10 am GMT  
Alternate 2 (with live discussion/live chat) Thursday, Jun 25 at 1 pm ET (US) / 5 pm GMT*

## **The Next Digital Leap to AI (An Interactive Webinar)**

Presented by  
Dr. Sam G. Samdani  
McKinsey & Company

Thanks to recent progress, breakthrough results, and demonstrations of artificial intelligence (AI) capabilities in products and services already in wide use, there's a lot of speculation that AI may usher in radical – arguably unprecedented – changes in the way people live and work. However, AI is not a single technology but a family of digital tools and techniques, e.g., computer vision, natural language, virtual assistants, robotic process automation, and advanced machine learning.

Chemical companies are using these tools to varying degrees. Some are taking an opportunistic approach, testing only one technology and piloting it in a specific function. Others are much bolder, adopting all five and then absorbing them across their entire organization.

Chemical companies are using these tools to varying degrees. Some are taking an opportunistic approach, testing only one technology and piloting it in a specific function. Others are much bolder, adopting all five and then absorbing them across their entire organization.

This presentation will be interactive. Attendees at the primary meeting will guide the discussion and attendee input about artificial intelligence and what it means for chemical engineers will be captured at all three meetings. In addition, attendees at all three meetings will be able to share their favorite ideas with other attendees. You may want to prepare ahead of time by reading Venkat Venkatasubramanian's open access AIChE Journal article titled "[The promise of artificial intelligence in chemical engineering: Is it here, finally?](#)"





Dr. Samdani is a senior industry expert in the Global Chemicals & Agriculture Practice at McKinsey & Company, a global management consulting firm. His responsibilities include providing thought leadership across a range of complex knowledge domains in advanced/engineered materials, pharmaceutical ingredients and specialty chemicals for the top management of many multinational chemical, pharmaceutical and petroleum companies as well as government agencies and NGOs worldwide. He also helps clients improve their strategic decision-making processes by overcoming the all-too-human cognitive biases (e.g., executive overconfidence, extreme loss aversion, and hostility to algorithms) with behavioral countermeasures (e.g., taking the outside view, and conducting decision pre-mortems).

Based in Summit, New Jersey, he enjoys the privilege of working with clients to accelerate their digital transformation by deploying advanced analytics and AI tools to help solve their toughest problems faster and unlock opportunities by improving their operating models. He has co-authored a book, *Going Digital: Realizing the Dreams of a Digital Bangladesh for All*, where he shares country-level strategies and stories from “where the future has already happened” to help catapult developing countries like Bangladesh from old-style agriculture and industrialization to the emerging new era of digitization and virtualization.

Prior to joining McKinsey, Sam worked at McGraw-Hill as an Associate Editor with *Chemical Engineering*, a monthly technical publication, covering advances in technologies and developments in regulatory affairs. He also edited two books – *Safety and Risk Management Tools and Techniques in the Chemical Process Industries (CPI)*, and *Heat Transfer Technologies and Practices for Effective Energy Management* – published by McGraw-Hill. He received his BS in chemical engineering from Yale University, and his PhD in chemical engineering from the University of Rochester. He also completed a graduate program in business journalism at Columbia University.

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

### **May Meeting Registration Information**

<b>Primary</b>	<b>Alternate 1</b>	<b>Alternate 2</b>
(Live Discussion/Live Chat)	(Live Discussion/Live Chat)	(Live Discussion/Live Chat)
Jun 24 at 9 PM EST / 1 AM GMT	Jun 25 at 6 AM EST / 10 AM GMT	Jun 25 at 1 PM EST / 5 PM GMT
Register in advance for the <a href="#">Primary Meeting</a>	Register in advance for the <a href="#">Alternate 1 Meeting</a>	Register in advance for the <a href="#">Alternate 2 Meeting</a>

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

## Introducing Our April Meeting Raffle Winner!

*Every month, a dues-paying member who signed in for the duration of the monthly webinar is selected at random to win a free year of VLS membership (Executive Committee members and previous winners during the current year are ineligible). We are pleased to introduce our April winner – Susan Bayley.*



**Q: : What school(s) did you go to?**

Rice University, Chemical Physics. University of Wisconsin-Madison, Nuclear Engineering

**Q: What kinds of jobs have you held?**

My career began as a contractor with the Department of Energy at Sandia National Laboratories evaluating the feasibility of Yucca Mountain and the Waste Isolation Pilot Plant to safely store radioactive wastes. From there, I worked on risk studies for the restart of a nuclear reactor (K-reactor) at the Savannah River Site. I then applied these risk techniques to the safety of chemical weapons disposal with the

U.S. Army at Edgewood Arsenal/Aberdeen Proving Ground. Wanting to move into an operations role, I took a position on Johnston Island with the Johnston Atoll Chemical Agent Disposal System and then in the safety department at the Anniston Chemical Weapons Disposal Facility. From there, I moved into the midstream oil and gas sector building the internal process safety capabilities for the Linde engineering office in Tulsa, OK. Joining the Center for Chemical Process Safety, participating on CCPS committees and promoting my staff's participation on committees both for the CCPS and the AIChE Health and Safety section provided the forums needed to contribute our expertise to the industry and to explore ways to improve our processes to better meet our client's changing needs. Changes in my personal life required that I temporarily find opportunities with high degrees of flexibility. For that reason, I have taken my team leadership and project management skills and applied them to the digital solutions industry. I assist in the communications between the business and agile project teams and the management of web and applications products to support our clients in their strategic digital transformation journeys.

**Q: Where do you live?**

Houston, TX

**Q: Why did you join the Virtual Local Section?**

COVID-19 brought me to the Virtual Local Section. My professional engineering licensing board requires a certain number of hours either face-to-face or in meetings where the participant can interact with the presenters via chat or some other means. I had planned to attend the AIChE Spring Meeting, but as COVID-19 swept through the country, the spring meeting was cancelled as was every other face-to-face engineering forum I could find. This led me to explore the AIChE for any online opportunities which then led me to the VLS. I was so impressed with the participatory nature of the April meeting, that I knew I wanted to join.

## AIChE News

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

Dates	Event
Jun 1 – 3	2020 Virtual Process Development Symposium
Jun 8	CCPS Latin America Regional TSC Meeting
Jun 17	Exploring Electrophoresis Using COMSOL Multiphysics
Jun 18	June 2020 TSC Meeting
Jun 24	Management of Change
Jun 29 – Jul 2	Sustainable Packaging Symposium 2020
Jul 20 – 23	2020 BASF Sponsored CCPS Faculty Workshop
Jul 29	Computational Catalysis: A Process Intensification Tool

## Upcoming VLS Meetings

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

Dates	Topic
July 2020	Julia Programming Language
September 2020	Student Presentation Competition
December 2020	State of the Section

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

## 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.](#)

### The 2020 Spring/GCPS Meeting will be Held Virtually

As a safety measure amidst the pandemic, AIChE will deliver its 2020 Spring Meeting and 16th Global Congress on Process Safety (and co-located events) virtually. Will now be available via the internet from August 17–21. [Review here.](#)

### Working from Home with Kids

Idell Bryan shares her strategy to make working remotely practical for both family and workplace. [Review here](#)

## The Virtual Local Section's Executive Committee

#### Officers

Chair: [Dan Lambert](#)  
Senior Vice Chair: [Paul Adamson](#)  
Vice Chair Pro Tem: [Aaron Sarafinas](#)  
Immediate Past Chair: [Kirsten Rosselot](#)  
Secretary: [Laura Gimpelson](#)  
Treasurer: [Jennifer Brand](#)

#### Directors

Member Care: [Louis Mielke](#)  
Publicity: [Paul Shuey](#)  
Newsletter: [Mario Arredondo](#)  
Programming: [Richard Evans](#)  
[Scott Clarke](#)  
Member Feedback: [Paul Wissmann](#)

### 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.

### 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](mailto: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, [Laura Gimpelson](#), to receive one hour of continuing education credit for attending this meeting.