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LETTER FROM THE CHAIR



Dear members & friends,

I recently ran across an [article](#) by the Harvard Business Review discussing the importance networking. The study reminded me of the many good benefits listed below.

In Person Networking/Learning Benefits:

- Increases job satisfaction
- Improves capacity to innovate
- Faster advancement
- Greater status/authority
- Improves quality of work
- Increases job satisfaction
- More job opportunities

Please join us at the following fall events (details below) as we look to grow and serve our society.

- September 24 – October 15: Advanced Manufacturing and Processing Conference
- October 10: TIEEP Energy Forum at the University of St Thomas
- October 10: STS Dinner Meeting at the University of St Thomas – Process Safety Panel
- November 7: STS Lunch Meeting – East/West Side Location
- December 5: STS Holiday Social (tentative)

Please continue to give us feedback by filling out the short survey below. We've decreased our event costs significantly per your request.

Best Regards,

William Shaw, M.S.

2024 STS AIChE Chair

E: sts-chair@aiiche.org

<https://www.linkedin.com/in/williamashaw/>

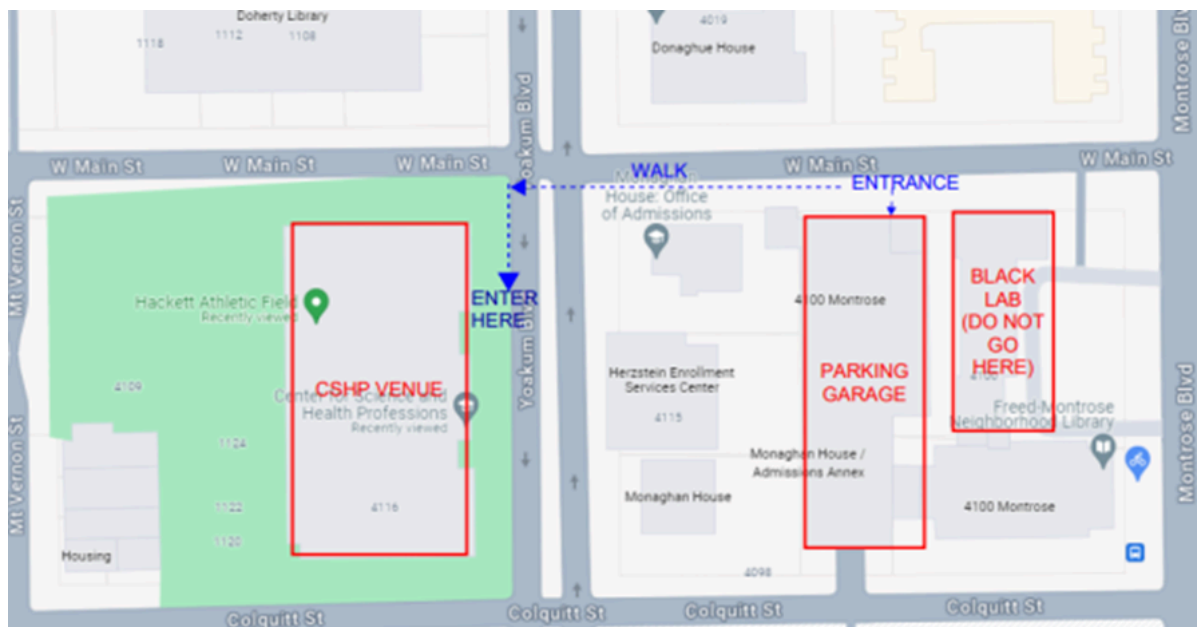
[STS AIChE OCTOBER 2024 DINNER MEETING \(Link\)](#)

Thursday, October 10, 2024, 6:00-8:15 pm CT

Event format: In-Person / Online

University of St. Thomas CSHP Atrium

3800 Montrose Blvd, Houston, TX 77006 ([Map](#))



Please join the South Texas Section for our monthly dinner meeting. The dinner keynote will be a panel discussion on process safety. The dinner meeting follows the [TIEEP Energy Forum](#).

- **4:00 PM - 6:00 PM** TIEEP Energy Forum (2 PDHs)
- **6:00 PM - 6:30 PM** Networking and Drinks
- **6:30 PM - 7:15 PM** Dinner
- **7:00 PM - 7:15 PM** Dessert, Announcements and Best Paper Awards
- **7:15 PM - 8:15 PM** Keynote Presentation (1 PDH by STS)

Registration

TIEEP Energy Forum is free to attend but registration is required to attend for planning purposes. Please register in the links below at the TIEEP sites linked.

- In Person - [CLICK HERE!](#)
- Online (via Zoom) - [CLICK HERE!](#)

STS AIChE Dinner Meeting

- In Person - [CLICK HERE!](#)
 - Non-members - \$30
 - STS Members -\$20
 - STS YP Members - \$10
 - STS Student Members - Free
- Online (via Microsoft Teams) - [CLICK HERE!](#)
 - Non-members - \$10
 - STS Members -\$5
 - STS YP Members - \$5

- STS Student Members - Free

We also encourage you to follow our [LinkedIn page](#) for updates and promote networking.

Keynote Presentation (1 PDH available)

Process Safety- Future Directions

Panelists: [Samantha Scruggs](#) – Process Safety Advisor - BP (left)

[Jack Chosnek, Ph.D.](#) – President and Principal - KnowledgeOne LLC (center)

[Nick Gonzales, Ph.D.](#) – Principal Technical Expert in Reactive Hazards - Shell Global Solutions, US Inc. (right)



Moderator: [Andreas Matzakos, Ph.D.](#) – Energy Expert and Consultant, AIChE STS Past-Chair



Abstract:

The purpose of the panel is to explore the future of process safety in the chemical, energy and manufacturing industries through the lenses of the technological, environmental and societal developments. As the rate of technology deployment is

increasing and the introduction of more complex chemical formulations is expanding, it is more than ever necessary for process engineers to safeguard their facilities with new thinking, skills and alliances. Learning from the successes and failures of the past we can chart a direction that promotes a generative safety culture, an evergreen learning environment, synergy with our communities, and an adoption of new technologies under the right training and safeguards. The evolution of Artificial Intelligence, combinatorial chemistry, biomolecular advances, along with stricter environmental and occupational safety laws bring opportunities and challenges that we all need to face. Let's hear from our panel on how they see the future of process safety and what they recommend on how a professional can prepare.

About the Panelists:

[Samantha Scruggs](#), PE, PMP, CCPSC-

Samantha has almost 20 years of experience in the process safety engineering, risk, HSSE and management system fields, with significant capability in ideating, developing, and delivering process safety and HSSE programs targeted from the operations front line to engineers and leadership.

Samantha has worked at BP since 2005, holding roles in the upstream, downstream and group organizations, in the office and in the field, at offshore and onshore assets, and in both domestic and international locations. She is currently the Process Safety Advisor – Framework for BP's central HSE & Carbon team, focused on the overall strategy for management of Process Safety within the company.

Samantha is a keen participant in the Center for Chemical Process Safety and joined the CCPS Planning Board in 2023. She has been bp's representative to the CCPS Technical Steering Committee (TSC) since 2016, and also acts as a member of the Mary Kay O'Connor Process Safety Center (MKOPSC) Steering Committee, representing bp since 2020. Samantha is a member of the AIChE Process Safety Division Leadership Team, serving as the 1st Vice Chair in 2024, 2nd Vice Chair in 2023 and as Director from 2020 - 2022. She also serves on two Process Safety Expert Groups within the International Association of Oil and Gas Producers (IOGP).

Samantha is a licensed Professional Engineer in Texas (2012), Project Management Professional (2013), and has a CCPS Process Safety Professional Certification (2016). She has a BS in Chemical Engineering and a certificate in Systems (Process) Safety Engineering from Texas A&M University, and a Post Graduate Certificate in Engineering Management from the University of Manchester. She is a Senior Member of AIChE and an Associate Member of IChemE.

[Jack Chosnek, Ph.D.](#) -

Jack Chosnek has over forty years of experience in the petrochemical industry with involvement in process safety in most of them. He worked for Celanese Corporation for 25 years in R&D, Tolling, Pilot Plants, Operations, Process Engineering and Process Safety Management in management and staff positions. He is President and Principal at KnowledgeOne LLC, where he has consulted for companies in the chemical, refining, oil and gas, offshore, and LNG industries, implementing process safety management systems, facilitating PHAs and LOPA/SIL studies, conducting incident investigations, and conducting process safety audits and gap analyses. He was process safety lead in two multi-billion-dollar projects (coal to gasoline and LNG liquefaction). He has developed software for PHA facilitation, Management of Change (MOC) and a Hazards Register. Jack is the Chair of the Technical Advisory Committee of the Mary Kay O'Connor Process Safety Center (MKOPSC). CCPS instructor for the Process Safety Fundamentals (Boot Camp) course. He was the chair of the PSM Workshops at the South Texas Section of AIChE from 2003 until 2020. Jack chaired PPSS at the 3rd Global Congress on Process Safety. He chaired

the PSM session of AIChE's Southwest Process Technology Conference for the first 10 years after its inception. Jack has published over 15 papers and is a listed contributor to the 4th edition of Lee's Loss Prevention in the Process Industries and in the editorial board of the upcoming 5th edition.

Jack has a PhD in Chemical Engineering from Missouri S&T University (previously University of Missouri-Rolla), and an MBA from Texas A&M—Corpus Christi. He is an AIChE Fellow and a Licensed Professional Engineer in the State of Texas as well as a Certified Process Safety Professional (CCPSC). Jack is the holder of three patents related to chemical production.

[Nick Gonzales, Ph.D.](#) -

Nick Gonzales earned a Ph.D. in chemistry from the University of Utah and held a postdoctoral research position in chemical engineering at UC Berkeley. He joined Shell in 1997 and is currently the principal technical expert in reactive hazards. His focus is reducing the potential for runaway chemical reactions in Shell's refineries and chemical plants by understanding the possible chemistry in each unit, assessing the potential consequences to people, assets, and the environment if a runaway occurs, and then suggesting mitigations to prevent such catastrophic events. These assessments require expertise in reactive chemistry, adiabatic calorimetry, layers of protection analysis, and two-phase reactive relief.

[Andreas Matzakos, Ph.D.](#) -

Andreas Matzakos is a recognized industry leader with strong track record on R&D program management, product development and novel technology deployment in Energy and Chemicals R&D. He is an AIChE Fellow and the past-chair of the South Texas Section. He has 30+ year experience in Process Development and Engineering, Catalysis and Reaction Engineering, Upstream/ Downstream Facilities. He is specialized in process modeling, optimization and design of Specialty Chemicals, Fuel Decarbonization, Gas Conversion, Improved Oil Recovery, and Water Treatment plants. He has developed and deployed many new processes in the above areas. He has passion for safety, health, environment, sustainability and transition to decarbonized energy sources. Before retiring from Shell in 2023 he held the position of Academic Partnerships Manager in Houston, Texas. In that role he developed long-term partnerships with academic and third-party R&D providers in the US, pursuing cutting edge technology development that aimed to solve challenging energy problems.

Andreas has led numerous R&D Teams, HS&E committees, project engineering teams and he participated in numerous joint industry committees, including the [RPSEA consortium](#) and the AIChE [RAPID](#) Institute. He has served as adjunct professor at the Chemical and Biomolecular Engineering Department of Rice University and he been awarded 8 US patents.

Andreas received a Diploma of ChE from the National Technical University of Athens, Greece, and a Ph.D. in ChE from Rice University in Houston, Texas. He enjoys cycling, swimming, travel, reading and photography.

TIEEP ENERGY FORUM: PRE-DINNER WORKSHOP

2024 TIEEP Energy Forum (PDH certificates available)

Theme: Lowering the Cost of Decarbonization

Speakers and Topics:

1) **Michiel Spoor**, Principal Energy Consultant at KBC Advanced Technologies (A Yokogawa Company)

Topic: Driving the Energy Transition: From Strategy to Action

Abstract:

- Overview of Carbon Reduction Strategies: Methodologies such as marginal abatement cost curves (MACCs), energy transition roadmaps, and consulting studies used to formulate carbon reduction strategies.
- Enhancing with Clarity and Action: Exploration of additional steps such as carbon intensity benchmarking to refine goals, set actionable targets, and engage stakeholders effectively.
- Deploying Advanced Technologies: Integrated process and supply chain modeling to optimize operations, track progress, and identify opportunities for emissions reduction.
- Case Study and Best Practices: Examination of a real-world example and best practices from oil refineries that have successfully initiated energy transition initiatives

2) **Ignasi Palou-Rivera**, Executive Director and Chief Technology Officer of the RAPID Manufacturing Institute

Topic: Enabling the Decarbonization and Circularity of the Chemical Industry through Process Technology Development and Scale-Up

Abstract: This talk will explore how the concepts of industrial decarbonization and circularity are connected in the context of the modern chemical industry. The RAPID Manufacturing Institute, a public/private partnership between the DOE and AIChE, is addressing both of these sustainability initiatives through the development and scale-up of process technologies.

3) **Sunny Trinh**, CEO, DevvStream, Inc.

Topic: Unlocking Carbon Credits with Technology to Address Climate Change

Abstract: Global climate change is a massive problem. It's estimated that we emit over 40 Gigatons of CO₂ and equivalent gases annually. In order for us to meet our global goals to prevent further damage to the planet, we will need to reduce this amount by 23 Gigatons annually by 2030. In order to have any chance of success, we need to tie economic incentives to carbon reducing activities. If used properly, carbon credits can be this incentive. We believe that the technology necessary to meet these emission reduction goals exists in the world today. The biggest challenge with many of these technologies is the added costs to implement them. Carbon credits can provide a financial bridge to help offset the additional costs and advance them further.



Michiel Spoor (left), **Ignasi Palou-Rivera** (center), and **Sunny Trinh** (right): Speakers for the TIEEP Energy Forum

Michiel Spoor: Michiel brings over three decades of experience in the global downstream business. A culturally sensitive professional, his clients include national and multinational energy companies, independent energy firms, investors, and governments. He's passionate about energy efficiency and energy transition. Michiel combines experience, training, and technology to help clients develop decarbonization strategies that conserve the plant's operating costs, while also sustaining long-term emission reduction targets. In addition to American and Eurasian oil refineries, Michiel also has experience in the petrochemical, fertilizer, and LNG industry. Michiel is known internationally as an authority on refinery energy efficiency due to his numerous papers and contributions to conferences and is author of the monthly Energy Saver column in the Chemical Processing magazine. He holds a master's degree in Chemical Process Technology from the Delft University of Technology in The Netherlands.

Ignasi Palou-Rivera: In addition to his role in the RAPID Manufacturing Institute, Ignasi serves as the President of the US Manufacturing Innovation Council (an independent non-profit connecting the Manufacturing USA institutes) and the Chair of the Manufacturing USA Council. With a career spanning more than 25 years, Ignasi has diverse expertise in chemical process development, process modeling, refinery planning, process technology valuation and commercialization, and R&D management. Prior to joining RAPID in 2017, Ignasi held roles at Aspentech, Applied Materials, BP, LanzaTech, and Argonne National Laboratory. In 2023, Ignasi was elected a Fellow of the American Institute of Chemical Engineers (AIChE) and he has been heavily involved as a volunteer in both in the Computing & Systems Technology Division (CAST) and the Sustainable Engineering Forum (SEF) AIChE Communities. Ignasi is a Past Chair of the Sustainable Engineering Forum, part of the Institute for Sustainability (IfS) Board, and a member of the PAIC Policy Committee. Furthermore, Ignasi also teaches on entrepreneurship and IP management as an adjunct faculty at the Illinois Institute of Technology. His educational background includes an Engineer degree from the Universitat Politècnica de Catalunya in Barcelona, a Ph.D. in Chemical Engineering from the University of Wisconsin-Madison, and post-doctoral research at MIT.

Sunny Trinh: With over 25 years in the electronics and semi-conductor industry, Sunny has helped hundreds of companies, from start-ups to large multi-billion-dollar companies, move their ideas through design, production and revenue. In addition, he has helped advanced numerous technologies with a current focus on ESG, sustainability, and carbon credits. Sunny is currently the CEO of DevvStream, Inc., a company that helps organizations and municipalities generate carbon credits through technologies that improves energy efficiency, reduce or sequester greenhouse gas emissions, or provide renewable energy. Sunny also serves as the Chief Digital Alchemist for Devvio Inc., where he utilized their leading edge blockchain technology to develop solutions and new business models in the ESG, sustainability and carbon markets. Prior to Devvio, Sunny led innovation as VP of Strategic Partnerships and Cool Stuff at Avnet, Inc., a Fortune 200 semiconductor distributor. He was also the Chief Operating Officer for Jooster, a technology company focused on health and wellness and VP of Sales for Arrow Electronics. During this time, he led the engineering team that re-designed a Corvette Stingray that was driven by a quadriplegic. Sunny also co-founded and served as CEO for 9:Fish Surfboards and was an adjunct professor for Cal Lutheran University's MBA program where he started the school's technology track.

Sunny holds a Bachelor's and a Master's degree in Engineering from Harvey Mudd College and a Master's in Business Administration from Cal Lutheran University. Sunny also holds several patents on electronic accessories for cell phones. A

couple of fun facts on Sunny include surfing 20ft waves on the north shore of Hawaii and competing in ballroom dancing in college.

AICHe STS October 2024 Dinner Meeting and TIEEP Energy Forum Sponsor

Silver Level: [Hunt Guillot & Associates](#)



For additional information and updates, please use [this link](#).

LIST OF UPCOMING EVENTS:

Date	Event Name	Speaker/Guests	Venue
Sept 24-26	2024 Advanced Manufacturing and Processing Conference	--	Virtual
Oct 10	International Energy Professionals Hiring Event	--	Trini Mendenhall Community Center
Oct 10	TIEEP Energy Forum	Michiel Spoor, Ignasi Palou-Rivera, and Sunny Trinh	University of St. Thomas (Map)
Oct 10	October 2024 Dinner Meeting	Samantha Scruggs, Jack Chosnek, Ph.D., Nick Gonzales, Ph.D., and Andreas Matzakos, Ph.D.	University of St. Thomas (Map)
Nov 7	STS Lunch Meeting	--	East and West side
Dec 5	STS Holiday Special	--	TBD

ANNOUNCEMENTS:

STS - AICHe 2025 Elections: Call for Nominations

STS-AICHe is seeking candidates for the following positions:

- Chair Elect

- Treasurer
- Position-1 Chair: Education
- Position-3 Chair: Communications

If you are interested in learning more about these leadership positions, please reach out to STS past-Chair Andreas Matzakos (sts-pastchair@aiiche.org). Also please feel free to suggest these positions to your friends/colleagues who are interested in engaging and contributing to the local chemical engineering community.

STS - AIChE Awards: Call for Nominations ([Link](#))



Nominations are being accepted through May 1st, 2025 for the following STS-AIChE Annual Awards:

- 2024 STS Best Applied Paper Award
- 2024 STS Best Fundamental Paper Award
- 2024 STS Best In-Practice Paper Award
- 2024 STS Outstanding Young Professional Award (Under 35)
- 2024 STS Distinguished Service Award
- 2024 STS Special Service Award(s)

Nomination Forms are available in the South Texan or on the STS–AIChE website. Nominations can also be made by contacting:

- Gary Gildert, GGildert@swbell.net
 - Harsh Agarwal, Harsh.H.Agarwal@Shell.com
 - Matt Christiansen, Matthew.Christiansen@shell.com
-

[2024 Advanced Manufacturing and Processing Conference](#), September 24-October 15

- Offered as a four-part webinar series to reach a broader audience, providing valuable insights and knowledge to professionals worldwide.
- Must-attend event for professionals eager to explore the latest advancements and innovations in the process industries.
- Join to learn more from industry leaders and discover cutting-edge innovations.

- Registration is **free** of cost.

[International Energy Professionals Hiring Event](#) , **October 10, 2024**

- Organized by SPE at [Trini Mendenhall Community Center](#) on **Oct 10th** from 10am-2pm.
- Provides job seekers with opportunities to meet with potential energy industry hiring companies in upstream oil and gas and renewables
- Register [here!](#) Event registration is preferred and timing will be in registration groups to allow for ease of parking and congestion. (Walk-ins may or may not be welcome). A resume/CV must be submitted at least 48 hours before the event.

STS Newsletter or Email Advertising

- STS-AIChE accepts payments for the placement of an ad in the [newsletter](#). These paid advertisements are classified as advertisements for personal benefits.
- We will continue to highlight and publicize events by our collaborators without any charges. Further, if there is a question or concern about any advertisement, the executive committee will decide on its publication within the newsletter.
- Stipulation: Not to exceed 25% of total transmission. For requests to advertise please email: sts-position3@aiiche.org or submit request directly [here](#).
- Proposed advertisement fee is provided below

Advertising Fees	Quarter A4 page (HTML print size)	Half A4 page	Full A4 page
Newsletter	\$200	\$375	\$700
Email blast (as part of STS business)	\$500	\$800	\$1500

STS AIChE Mentorship Program Initiative

- STS AIChE has worked diligently to launch its own mentorship program.
- A team of STS AIChE officers and committee chairs made their best efforts to match mentors and mentees based upon the received data and inform mentors and mentees accordingly.
- The mentorship program was kicked off in December 2023. For questions about the program, please contact Mona Setoodeh, at mona.setoodeh@gmail.com

STS AIChE Engagement Survey

- Request to fill out the following Short Engagement Survey so that we can get a pulse on what you like/dislike in the past and work on improving in 2024.
- Please see this [link](#) for survey.

Recordings of AIChE STS Dinner Meetings

- All recordings of AIChE STS 2024 Dinner Meetings are now available on our YouTube Channel. Do check them out [here](#).

LinkedIn Page for STS AIChE



Follow our [LinkedIn page](#) for updates. Don't forget to tag the page (type "@South Texas" and select South Texas Section of AIChE) in your personal posts related to STS AIChE.

Add STS to your AIChE National membership.



Add on option: <https://ecommerce.aiche.org/aiche-online/Membership/Home/MemberAddonsStandAlone>

STS-AIChE Join Us link: <https://ecommerce.aiche.org/aiche-online/Membership/Home/MemberAddonsStandAlone>

Membership is free for students.

CONTACT:

Contact STS-AIChE Newsletter Editor, [Dr. Harsh Agarwal](#) at aiche.sts.newsletter@gmail.com with feedback, questions, and ideas for the next newsletter.

Reach out to the communication officer at sts-position3@aiiche.org if you have any questions

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