



Letter from the Incoming Chair:



Dear colleagues,

The New Year brings the opportunity to think about our professional growth and our place in the profession. It is the time to assess our values, priorities and to set goals. The South Texas Section is your home when it comes to professional growth. With the modern mobility between jobs and industries, it is essential to be grounded to a network of chemical engineering colleagues that provide you lifelong support, insight, learnings and job placement opportunities. I have been with the same employer for all my career, and still find comfort in visiting the STS events to reconnect and engage with my lifelong friends. I will still do that long after I retire from my current employment. I invite you to make more friends and to offer your talents and services to your community by getting engaged with our [numerous events](#) and [opportunities](#) (see below).

A non-profit organization like STS can't be successful without our tireless volunteers. They received numerous benefits in their career and in return they "pay it forward". Their names are too many to mention here, but some are listed below as **2023 STS Officers** and the [Congratulations](#) sections. Please remember to thank them for their selflessness the next time you have the chance to meet with them.

This year is extra special to get involved with AIChE STS.

- First, we celebrate our 80th anniversary. STS achieved Local Section status on March 13, 1942, so we are already in our 81st year! The pandemic delayed the 80th anniversary celebration last year, but this year is different. Stay tuned for the event that will commemorate this great milestone.
- Second, 2023 will bring the [AIChE Spring Meeting and 19th GCPS](#) to Houston. What a great opportunity to attend the sessions in town at minimal travel expense! Moreover, we

could not pass the opportunity to invite the National [AIChE President, Billy Bardin](#), to give the keynote presentation at the March 16th dinner meeting. He will be joined by other National Executive Committee members, so it will be a great time to interact with them in an informal setting.

Thus, with all this exciting 2023 repertoire, we wish you a **Happy New Year** with *growth, learning, involvement and impact*.

Goals for 2023:

At the December 10, 2022 Annual Planning meeting, the executive committee adopted the following three 2023 goals, as continuation of the work that we started in 2022. Since this is a collective effort, we invite members to express their interest in joining the planning committee by contacting the respective chairs below.

Goal Name	Description	Chair
Institute a Mentorship and Career Development Program	Provide career guidance seminars, mentor matching, a career growth guide with resources, etc.	Mona Setoodeh , sts-mentorship@aiche.org
Increase section marketing and relevancy of programming to our membership	Increase public awareness of our organization. Ensure that lectures and breakout sessions are relevant to the majority.	Nitish Mittal sts-position3@aiche.org
Increase member participation by increasing networking and expanding locations	Pursue events in locations outside Houston. Diversify the event types and dates.	Bill Shaw sts-chairelect@aiche.org

Welcome 2023 STS Officers and Committee Chairs:

Our [2023 STS Officers](#) are engaged and excited to offer events and programming for all. Please welcome our committee chairs and volunteers who are steadfast and energetic!

- Dr. Andreas Matzakos (Chair) sts-chair@aiche.org
- Mr. William Alexander Shaw (Chair Elect) sts-chairelect@aiche.org
- Ms. Julie D. White (Past Chair and Member Rep - By-Laws Committee) sts-pastchair@aiche.org
- Mr. Joseph Alexander Hernandez (Secretary) sts-secretary@aiche.org
- Mrs. Sarah Olmedo (Treasurer) sts-treasurer@aiche.org
- Mrs. Yasmine McColl (Officer #1: Continuous Education) sts-position1@aiche.org
- Dr. Michael Wong (Officer #2: Community Outreach) sts-position2@aiche.org
- Dr. Nitish Mittal (Officer #3: Communication) sts-position3@aiche.org
- Mr. Dennis Griffith (Officer #4: Human Resources) sts-position4@aiche.org
- Mr. Ramprasad Kamisetty (Young Professionals Chair) sts-yp@aiche.org

- Mr. Matthew Kolodney (Officer Liaison and Member Rep - K12 Committee) sts-liaison@aiiche.org and sts-K12@aiiche.org
- Dr. Victor Edwards (Member Rep - ECH Liaison)
- Mr. Dale L Embry (Member Rep – P.E. Exam Preparation Committee) sts-PEPrep@aiiche.org
- Mr. Thomas E Menn (Member Rep - Awards Committee) sts-awards@aiiche.org
- Mr. John C. Middleton (Member Rep - Arrangements Committee)
- Mr. Trevor Alexander Rice (Member Rep - A/V and IT Committee)
- Dr. Alan P Rossiter (Member Rep - SPTC/Forums)
- Dr. Mona Setoodeh (Member Rep - Mentorship Committee) mentorship@aiiche.org
- Mr. Harshad C Shah (Member Rep - Membership Committee) sts-membership@aiiche.org
- Ms. Rachel Victoria Carlton (Web Master) sts-webmaster@aiiche.org

Come Join Us

Each year STS-AIChE has more than 35 volunteers to run this exceptional professional society now in its 80th year. Come join us as a volunteer or committee member! We still have some vacancies.

Our next meeting is on Jan 12th where our keynote is “*How Can We Minimize the Detrimental Effects of Human Biases on Climate Solution Decisions?*” by Dr. Tom Rehm. Tom Rehm spent his career in oil refining and petrochemicals, retiring in 2009 from Saudi Aramco after working 12 years in Saudi Arabia. This is an exciting opportunity to hear about several climate solutions initiatives including the AIChE Climate Solutions Community! Full event information- <https://www.aiiche.org/community/sites/local-sections/sts/events/sts-aiiche-january-12th-2023-hybrid-meeting>

Many prized volunteer events follow in *Announcements* and recognitions in *Congratulations* sections. I want to thank the volunteers who set STS-AIChE up for a successful 2023.

Feel free to follow our [Group postings at LinkedIn](#), to allow you to interact with us and tell us what exciting things are happening in the profession. Moreover, feel free to drop me an email note to share your private thoughts about how we can serve the section better. As usual, ideas come with the offer to volunteer to implement them. 😊

Best Regards,

Andreas Matzakos, Ph.D.

2023 STS AIChE Chair

E: sts-chair@aiiche.org)

www.linkedin.com/in/matzakos

Key Dates 2023:

Thursday Dinner Meetings keynotes:

Date	Dinner Speaker	Title
<u>January 12, 2023</u>	Tom Rehm - Climate Solutions Community	How Can We Minimize the Detrimental Effects of Human Biases on Climate Solution Decisions?
<u>February 2, 2023</u>	Faisal Khan – TAMU MKO Process Safety Center	Process Safety Challenges in the Energy Transition
March 16, 2023	Billy Bardin - Dow/AIChE Chair	State of AIChE and Vision for the future
April 13, 2023	TBD	
May 4, 2023	Jose Santiesteban - ExxonMobil (retired)	The Frontiers of Chemical Engineering report and Energy Transition Implications
September 7, 2023	Sibani Lisa Biswal- Rice University ChBE Department	Remediating Plugged Flow Lines with Nanofluids
September 28, 2023 (tentative, during SPTC)	Jane Stricker-Greater Houston Partnership	Houston Climate Adaptation Plans
November 2, 2023	TBD	

Other Events:

- Informal crawfish boil (TBD)
- STS-AIChE 80th year anniversary celebration (TBD)
- Houston Ship Channel Tour (June 3rd, 2023)
- Southwest Process Technology Conference (TBD in September or October, 2023)
- Holiday Social (December 7th, 2023)

January 2023 Dinner meeting:

Thursday, January 12, 2023, 5:30-9pm CT

Event format: In-Person / Online

Location: [The Bougainvilleas](#), 12126 Westheimer Road, Houston, TX 77077

Please join us for an engaging evening of state-of-the-art information and networking.

- 5:30PM - 6:30PM Workshop, "The Road Towards Decarbonization: Regulation, Implementation, and Monetization" by **Mrs. Kristine Klavers**
- 6:00PM - 7:00PM Social/Networking Time
- 7:00PM - 8:00PM Dinner and STS Announcements & Awards Presentation
- 8:00PM - 9:00PM Keynote Presentation by **Dr. Tom Rehm**

Keynote Presentation

How Can We Minimize the Detrimental Effects of Human Biases on Climate Solution Decisions? (1 PDH)

How do human biases detrimentally affect climate solution decisions and what can be done to minimize those biases? Several climate solution initiatives will be reviewed, including the AIChE Climate Solutions Community.

Please register using the following links: [In-person](#) and [on-line](#).

Full event information- <https://www.aiche.org/community/sites/local-sections/sts/events/sts-aiche-january-12th-2023-hybrid-meeting>

February 2023 Dinner meeting:

Thursday, February 2, 2023, 5:30-9pm CT

Event format: In-Person / Online

Location: [Houston Marriott Sugarland](#), 16090 City Walk, Sugarland, TX 77479

Keynote Presentation: Safety in Energy Transition by Dr. Faisal Khan

[Full event information](#) - Register in-person by January 12, 2023 and save \$5 in registration. Registration inks are in preparation.

Announcements:

STS AIChE Volunteers: 2023 Science Engineering Fair of Houston Feb 10-11th

- Feb 10-11th 2023 at George R. Brown Convention Center, downtown Houston
- STS-AIChE Special Award Judging is long-standing, since ~1958
- Contact Matt Kolodney at mkolodney1@comcast.net

2023 ECH Climate Solutions Symposium April 22nd, 2023

The Engineering, Science and Technology Council of Houston is pleased to announce the 2nd ECH Climate Solutions Symposium on Saturday, April 22, 2023, on Earth Day.

This half-day symposium will be held at the University of Houston Student Center Theater, at 1:00-4:00pm, followed by a Meet-and-Greet in the Student Center's Ballroom, at 4:00-5:30pm.

The symposium will feature three important climate solution initiatives: *The Sustainable Energy Corps*, *Let's Make Texas More Reliable and Cleaner*, and *Global Solutions and Outreach Programs*. Sponsorship opportunities exist for interested parties.

- For sponsorship interest, contact Dr. Tom Rehm at tom@tomrehm.com
- You can register later when a link is available at <https://www.echouston.org/category/climate-solution-symposium/>

STS - AIChE Awards: Time for 2022 Nominations by May 1st, 2023

Nominations are being accepted through May 1st, 2023 for the following STS-AIChE Annual Awards:

- 2022 STS Best Applied Paper Award
- 2022 STS Best Fundamental Paper Award
- 2022 STS Best In-Practice Paper Award
- 2022 STS Outstanding Young Professional Award (Under 35)
- 2022 STS Distinguished Service Award (Over 36)
- 2022 STS Special Service Award(s)

Nomination Forms are available on the STS – AIChE website:

<https://www.aiche.org/community/sites/local-sections/sts/files/2022-annual-awards-nomination-form> or by contacting:

- Matt Christiansen 281-544-6476 Matthew.Christiansen@shell.com
- Tom Menn 281-485-3719 ThomasMenn@SBCGlobal.net
- Ryan Stephens 281-544-8447 Ryan.Stephens@Shell.com

STS AIChE Volunteers: 2023 Offshore Technology Conference (OTC) May 1-4th

- May 1-4th 2023 at NRG Park, Houston, Texas
- Receive Free Pass*, Parking*, and all the free goodies/junk you can carry away! (* entire OTC). Note: You may attend Technical Sessions.
- Must register to volunteer before 27th March 2023 (estimated)
- Attend Orientation Meeting (mandatory) & serve 4 hours in either arrangements, registration, or special assignment by OTC Staff.
- Contact Tom Menn at thomasmenn@sbcglobal.net

SPE Energy Professionals Hiring Event at 2023 OTC May 4th

- May 4th 2023 at NRG Park, Houston, Texas.
- STS professional members are entitled to participate as job seekers or work as volunteers. This is part of our long-standing collaboration with the [Society of Petroleum Engineers, Gulf Coast Section](#).
- For more information about the event, location, time, registration, and participants, visit our website: <https://www.spegcs.org/hiring-event>

Congratulations:

Victor Henry Edwards receives 2021 STS - AIChE E. L. Ekholm Distinguished Leadership Award



Julie D. White (L) and Victor H. Edwards (R)

Victor received his B.A. in Chemical Engineering and Chemistry from Rice University in 1962 and his Ph. D. in Chemical Engineering and Life Sciences from the University of California at Berkeley in 1967. Vic is a Registered Professional Engineer in Texas (1977) and is a Fellow of AIChE (1994) as well as being a Life Member.

While a student at Rice, he had summer jobs at Union Carbide Chemical Company, Humble Oil & Refining Company, and Shell Development Company.

Vic was a Graduate Student Research Assistant at California – Berkeley. After receiving his Ph. D., he served as Program Manager, Enzyme Engineering and Associate Program Director, Engineering Chemistry - U. S. National Science Foundation. Vic then became an Assistant Professor of Chemical Engineering at Cornell. He then served as a Research Fellow at Merck, Sharp & Dohme Research Laboratories. Vic then joined United Energy Resources as a Supervising Research Engineer. He then returned to Rice to serve as a Visiting Professor of Environmental Engineering. Vic then joined Fluor Engineers and Constructors as a Senior Process Engineer. He then stepped out as a Chemical & Environmental Engineering Consultant for a few years and also served as the Southwest Editor of **PLANT SERVICES** magazine. Vic then joined what became IHI Engineering & Construction International and retired after 30 years as the Director of Process Safety. After retirement, he founded VHE Technical Analysis which he still operates.

Vic has published more than 70 technical articles and several book chapters in Perry's *Chemical Engineering Handbook* in the 8th and 9th editions plus one book with Suzanne A.

Shelley, "**Careers in Chemical and Biomolecular Engineering**", 186 pages, CRC Press/Taylor and Francis Group (August 2018). He also has one U. S. patent.

Vic served the South Texas Section – AIChE and AIChE in the following roles:

- Chair of the 1st Process Plant Safety Symposium, STS -- AIChE, Houston (1992).
- STS – AIChE Progression: 1994 Chair-Elect, 1995 Chair, and 1996 Past Chair.
- Chair, 2nd International Plant Operations and Design Conference -- AIChE, Houston (1995).
- Chair, AIChE Global Congress on Process Safety (2013).
- Councilor for STS – AIChE on the Engineering, Science, and Technology Council of Houston (1987-1992; 2018-present).

He also served as:

- Inaugural Chair of the Industrial Advisory Council of the Department of Chemical Engineering, Prairie View A & M. (1992 – 1994)
- Mary K. O'Connor Process Safety Center, Texas A&M Technical Advisory Committee (1995-Present; Chair, 2005-2011).
- Editorial Board Member of **Chemical Processing** magazine, (2004 - present).
- Centennial Council, Department of Chemical and Biomolecular Engineering, Rice (2009-2013).

In addition to the numerous Corporate Awards Vic has received, he has received the following South Texas Section – AIChE Awards:

- 1981 STS – AIChE Robert L. Churchwell Environmental Award.
- 1991 STS – AIChE Distinguished Service Award.
- 2011 STS – AIChE Special Service Award ~ Process Safety Management (PSM) Workshop & STS Chief Information Officer.
- 2015 STS – AIChE Special Service Award ~ Ensuring that STS Members Receive AIChE Fellow Recognition.

Vic has also received the following awards of note:

- 1992 Distinguished Service Award, Prairie View A&M AIChE Student Chapter.
- 2002 Service Award, Mary K. O'Connor Process Safety Center, Texas A & M.
- 2015 Norton H. Walton/Russell L. Miller Award, AIChE Safety and Health Division for Outstanding Contributions and Achievements in the Fields of Chemical Engineering Loss Prevention, Safety, and Health

Vic and his wife have one daughter, one son, one granddaughter, and five grandsons.

Tom Rehm is recognized for his 50 years of AIChE membership and service



Tom's wife Mary (L), Tom Rehm (C) and Andreas Matzakos (R)

Tom Rehm spent his career in oil refining and petrochemicals, retiring in 2009 from Saudi Aramco after working 12 years in Saudi Arabia. Tom completed a B.S. degree in Chemical Engineering at the University of Arkansas in 1972. At Northwestern University he completed his M.S. degree in 1982 and his doctorate in 1985.

Tom served on the STS Executive Committee from 2016 to 2017 as Human Resources Officer and as Chair in 2019. He was a director of the AIChE Safety and Health Division from 2017-2019. He is now involved in several initiatives on climate solutions. Tom is the 2022-2023 past chair of the AIChE Climate Solutions Community. He co-founded Global Solutions and Outreach Programs, which proposes using the Wicked Problem Approach to figure out the best national, regional, and global action plans for resolving global warming and adapting to climate change.

He holds memberships in the American Institute of Chemical Engineers (AIChE), the American Chemical Society (ACS), the American Association for the Advancement of Science (AAAS), the American Nuclear Society (ANS) and the American Society for Testing and Materials (ASTM). He is a member of the ASTM Climate and Community Subcommittee E50.07.

Tom's escape valve is competitive pocket billiards. His claim to fame was defeating the reigning U.S. Amateur Champion in March 2012 to win a trip to Las Vegas for the American Poolplayers Association National Championships. Tom and his wife Mary have ten grandchildren, six in Texas and four in New Zealand.

Alan P. Rossiter receives 2022 STS - AIChE Lifetime Achievement Award



Andreas Matzakos (L) and Alan P. Rossiter (R)

Alan was born in Southern Rhodesia (now Zimbabwe), and was educated there through high school. Alan then moved to England to attend the University of Cambridge, where received his BA, MA, MEng and PhD, all in Chemical Engineering.

After graduating Alan worked with ICI (Imperial Chemical Industries) for nine years in process design, technical support and research, before joining Linnhoff March (energy efficiency consultants), where he carried out consulting projects for eight years. He founded Rossiter and Associates in 1997 focusing on industrial energy efficiency. Later Alan joined Saudi Basic Industries (SABIC) in Saudi Arabia for a short time. He is currently Executive Director, External Relations & Educational Program Development, for UH Energy at the University of Houston.

Alan is a licensed professional engineer (Texas). He has over 100 publications, including 18 articles in AIChE's Chemical Engineering Progress. He is also the author of Professional Excellence – Beyond Technical Competence (Wiley, 2008), and the lead author of Energy Management and Efficiency for the Process Industries (AIChE/ Wiley, 2015). He is the contributing editor for Chemical Processing Magazine's award-winning monthly Energy Saver column.

Alan is a Fellow of the American Institute of Chemical Engineers. At the national level, he has served on AIChE's Career and Education Operating Council (CEOC). Locally and regionally, he was the STS – AIChE 2006/7 Exec. Com. Position No. 4, 2009 Chair-Elect, 2010 Chair, and 2011 Past Chair. Alan was one of the three founders of the AIChE Southwest Process Technology Conference in 2009. He has remained in various leadership positions for SPTC since its inception 14 years ago.

Alan and his wife live in Bellaire, Texas. They have two adult sons. Alan is a deacon at Crosspoint Church, Bellaire. He is also a semi-avid cyclist

Dale Embry receives 2021 STS - AIChE Distinguished Service Award



Julie D. White (L), Dale L. Embry (C), Dale's wife Mrs. Judy Embry (R)

Dale is a native Texan and grew up in the Cleburne area. Dale received his BS Ch. E. in 1977 and MS Ch. E. in 1980, both from Texas A&M Univ. He also did post-graduate studies at Univ. of Tulsa. Dale is a Registered Professional Engineer in Texas, Oklahoma, and Louisiana. He is a Fellow of AIChE.

After receiving his MS Ch. E. Dale joined Phillips Petroleum in Bartlesville, OK and served as an Engineering Specialist for development and maintenance of in-house and licensed process simulation tools. After the ConocoPhillips merger, he worked as a Principal Engineer in Ponca City, OK. Dale then moved to Houston as a Heavy Oil Process Development Principal Engineer. He then worked for Phillips 66 as the Director of Crude Assays and Process Simulation Support. Presently Dale is with ConocoPhillips as a Principal LNG Engineer.

Dale has served as a representative to AIChE's DIPPR for the API Technical Data Committee and previously for Phillips Petroleum. He served on the American Petroleum Institute (API) Committee on Petroleum Measurement (COPM) and served as Chair of the COPM/COMQ Physical Properties working group (1992-1995, 2012 to the present). Dale is the ConocoPhillips representative to Committee on Measurement Quality (COMQ) and COPM as well as API Committee on Refining Equipment (CRE) and served as Chair of API Technical Data Committee (2007-2018). He is currently a representative to the GPA Midstream Association and serves as Co-Chair of the Research Committee's Project 213 (solids formation in LNG).

Dale's involvement with AIChE Local Sections began with the Bartlesville, OK Local Section of AIChE where he Served as Chair, Continuing Education Chair, and Director at various times. He arranged for over 40 different continuing education courses for the Bartlesville Local Section. Dale has served the South Texas Section – AIChE as the 2014/15 Executive Committee Position No. 4 and as the CAST Chair. Currently he is serving as organizer and Co-Director of the P.E. Review Course since 2010.

Dale has received the following awards from the South Texas Section -- AIChE:

- 2010 STS – AIChE Special Service Award for his efforts in behalf of the P. E. Refresher Course,
- 2011 AIChE “Shining Star” Honorable Mention for Volunteer of the Year Award (STS – AIChE nomination),
- 2021 STS – AIChE “Gary” Award (co-recipient) for their continued efforts in behalf of the P. E. Refresher Course.

Dale loves to travel and learn about new things. He and his wife are looking forward to getting out and traveling more as restrictions are lifted. They plan to take more trips to California in the future to visit their daughter and new grandson.

2021 Outstanding Young Professional – Lucas Von Ruff



Lucas Von Ruff (L), *Lucas's mother* Cristina Murcia Von Ruff (C), and Julie D. White (R)

2021 Best Fundamental Paper Award

The 2021 STS – AICHE Best Fundamental Paper was titled “Memory Seeds Enable High Structural Phase Purity in 2D Perovskite Films for High-Efficiency Devices” and was published in *ADVANCED MATERIALS*, Vol. 33, June 6, 2021, pgs. 2007176 (1 of 11).

The authors are: Siraj Sidhik, Wenbin Li, Mohammad H. K. Samani, Hao Zhang, Yafei Wang, Justin Hoffman, Austin K. Fehr, Claudine Katan, Jacky Even, Mercouri G. Kanatzidis, Jean-Christophe Blancon, Aditya D. Mohite, Amanda B. Marciel, & Michael S. Wong (The latter two authors are STS – AICHE Members).



Mo Samani (L), Amanda B. Marciel (C) and Julie D. White (R)



Andreas Matzakos (L) and M. S. Wong (R)

2021 Best Applied Paper Award

The title of the 2021 STS – AICHE Best Applied Paper is “Electrochemical ammonia synthesis via nitrate reduction on Fe single atom catalyst” and was published in NATURE COMMUNICATIONS, Vol. 12, May 17, 2021, pp. 2870 (1/10).

The AUTHORS are: Zhen-Yu Wu, Mohammadreza Karamad, Xue Yong, Qizheng Huang, David A. Cullen, Peng Zhu, Chuan Xia, Qunfeng Xiao, Mohsen Shakouri, Feng-Yang Chen, Jung Yoon (Timothy) Kim, Yang Xia, Kimberly Heck, Yongfeng Hu, Michael S. Wong, Qilin Li, Ian Gates, Samira Siahrostami, & Haotian T. Wang. Both Drs. Wang and Wong are STS – AICHE Members.



Andreas Matzakos (L), H. T. Wang (C), and M. S. Wong (R)

2021 Best In-practice Paper Award

The title of the 2021 STS – AIChE Best In-Practice Paper is “Hazard Evaluation of Metal–Organic Framework Synthesis and Scale-up: A Laboratory Safety Perspective” was published in ACS Chemical Health & Safety, Vol. 28, July 27, 2021, pp. 358-368. The Authors are Harold U. Escobar-Hernandez (STS – AIChE Member), Ruiqing Shen, Maria I. Papadaki, Joshua A. Powell, Hong-Cai Zhou, & Qingsheng Wang.



Harold U. Escobar-Hernandez (L) and Julie White (R)

2021 STS-AIChE Special Service Award – Kanjakha Pal



Andreas Matzakos (L) and Kanjakha Pal (R)

2021 STS-AIChE “Gary” Award in memoriam: Gary L. Leach

The recipients of the 2021 South Texas Section – AIChE “Gary” Award in memoriam to Gary L. Leach are: Dale L. Embry and Carol K. Schmidt for their past and continuing efforts on behalf of the P. E. Exam Preparation Refresher Course since the first such class in 2010.



Carol Schmidt (L), Andreas Matzakos (C) and Dale L. Embry (R)

2022 STS-AIChE Young Professionals Chair Appreciation – Ramprasad Kamisetty (to be presented at the January 2023 meeting)

2022 Southwest Process Technology Conference Best Presentation Award – Prof. Jeffrey D. Rimer - *“Discovering New Paradigms in the Design and Preparation of Zeolite Catalysts”* (to be presented at the January 2023 meeting)

More pictures and details can be found at our website -

<https://www.aiche.org/community/sites/local-sections/sts/photos>