

Highlights from the Texas Industrial Energy Efficiency Program Newsletter Volume 4, Number 2, February 2023

Greetings, from the Texas Industrial Energy Efficiency Program!

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Completed, in Progress, Upcoming

TIEEP, together with our sister organization [TIEEN \(the Texas Industrial Energy Efficiency Network\)](#) have started 2023 with a new focus on supporting the next generation of energy leaders. This includes an outreach to grade school children in January, and a webinar series for university students and young professionals that is currently in progress. We also look forward to our regular TIEEP Spring Energy Forum (March 16)

and Water Forum (May 4). TIEEN, meanwhile, is preparing for its annual webinar on April 12. You'll find details of all these events in this edition of our Highlights Bulletin.

Student Outreach Completed

TIEEP and TIEEN collaborated with the University of Houston's STEM Center to present a STEM Zone Saturday event on Energy in Industry, January 28, 2023. This was a three-hour program, including interactive presentations and hands-on activities for students grades 3-12. The program was also supported by the University of Houston's Cullen College of Engineering and Prairie View A&M University's Department of Chemical Engineering, and by ExxonMobil. The overall program consisted of:

Presentation 1: Distillation in industry – Alan Rossiter, UH Energy

Presentation 2: Pipeline Integrity – Christina Philbrook, ExxonMobil

Hands on Energy Activities – Included the following fascinating topics: Remediating Oil Spills, Airzooka, Elephant Toothpaste, Energy Beads, Crystal Engineering, Polymer Sustainability, Energy and Catalysts, Electrolysis

Presentation 3: Hydrogen Production by Electrolysis of Water - Nabila Shamim, PVAMU, Department of Chemical Engineering



Nabila Shamim, from PVAMU's Department of Chemical Engineering, presented on Hydrogen Production by Electrolysis of Water to an energized audience of grade-school students.

Approximately 100 students in grades 3-12 attended, many of them accompanied by their parents. In addition, approximately 15 student workers (mostly undergraduates) from the University of Houston assisted as mentors and provided logistical support. Additional students (mostly graduates) from the University of Houston and from Prairie View A&M University assisted at the various hands-on activities. Consequently, this event impacted students from Grade 3 to PhD candidate level. The event attracted media attention, and a very positive article about it appeared in the Sunday Houston Chronicle on January 29.



Grade-school students participated in hands-on activities, mentored by university students.

In Progress

TIEEP is collaborating with UH Energy and the Energy Coalition in presenting a webinar series on Energy Careers and Leadership. This six-part series featuring key industry leaders provides important insights into the rapidly changing industry, critical skills and understanding of complex related issues for those working in or aspiring to work in the energy industry in any capacity – including the process industries. The program started on February 3, and runs 10-11 a.m. on Fridays, from February 3 to March 24 (excluding March 10 and 17). The speakers, shown here and on the next page, include people who hold or have held positions such as senior vice president or chief engineer in major energy companies. There are also a couple of younger rising leaders on the agenda. They cover topics ranging from interviewing skills and leadership principles to the dynamics of the energy transition.

Session 1: February 3

Living Your Interview: A Foundation for Career Success

Greg Yeo, ExxonMobil Chemical,
Chief Engineer (retired)



Session 2: February 10
Dilemmas in the Energy Transition, and How They Shape My Energy Career
Richard (Rich) Howe, Shell's Senior Vice President
for Upstream Transformation.

Session 3: February 17

Taking the Risk with Renewables

Tom Weirich, Marketing – North America,
EDP Renewables. Author of *We Took the Risk:
The Stories Behind the Early Risk Takers in the U.S. Renewable Energy
Industry and the Leadership Traits that Made Them a Success*



Registration for the webinar series is open to anyone. More than 200 people have registered, mostly students from local, national and international universities, and young professionals. Enrolled students can earn the non-credit *Certificate in Energy Leadership* by attending at least four webinars and achieving a passing grade on a series of tests.



Session 4: February 24
Building and Intentional Career
Mona Setoodeh, President, CH-IV International

Session 5: March 3

Authentic Leadership

Cindy Yeilding, Senior Vice President,
BP America, retired; Director, Denbury Inc.
and The Center for Houston's Future



Session 6: March 24
Key Skills for Emerging Leaders in the
Low-Carbon World
Hayley Ryan, Infrastructure Lead, ExxonMobil
Low Carbon Solutions

The early webinars have been received enthusiastically. Additional details, including bios of the presenters, are available [here](#). You can register for the remaining webinars [here](#).

Upcoming Event

TIEEP Spring Energy Forum

Date & Time: Thursday, March 16, 2023, 4:00-6:00 pm

Theme: *Energy Efficiency and Decarbonization for the Process Industries*

Venue: Silver Sycamore Event Venue, 5111 Pine Ave, Pasadena, TX 77503

Cost: Attendance at the Energy Forum is free.

Additional Details: Hybrid event. This event is co-hosted by TIEEP and STS-AIChE.

PDH certificates available.

- In-person registration: <https://www.eventbrite.com/e/tieep-spring-energy-forum-tickets-492612436057>
- Online registration: <https://uh-edu-cougarnet.zoom.us/meeting/register/tJAlf-ypqioiGtG22tTpx8V80b71sCyggm5V>

STS-AIChE Dinner

The TIEEP Energy Forum will be followed by STS-AIChE's monthly dinner meeting program. This includes:

- **6:00PM - 6:45PM** Social/Networking Time
- **6:45PM - 7:15PM** Dinner
- **7:15PM - 8:00PM** Announcements & Awards
- **8:00PM - 9:00PM** Keynote Presentation by Dr. Billy B Bardin, *State of AIChE and Vision for the Future*

Registration links for the dinner meeting program are given below. Registration costs apply:

In-person: <https://aiche.us12.list-manage.com/track/click?u=c5eceb0b7aba583e9dabb0295&id=282446e026&e=9f6bdb5d96>

Virtual: <https://aiche.us12.list-manage.com/track/click?u=c5eceb0b7aba583e9dabb0295&id=e5f182caab&e=9f6bdb5d96>

STS-AIChE Sponsors



Energy Forum Overview

Decarbonization has become an imperative for the process industries, and energy efficiency has long been recognized an essential strategy to help achieve decarbonization. Unlike other approaches, energy efficiency inherently reduces operating costs while it decreases emissions, so it offers a positive return on investment, even without factoring in environmental benefits. However, there are also many other potentially attractive options for decarbonization. The presentations in our Spring Energy Forum address three separate topics:

Presentation 1: Technical Assistance for Energy Intensive Manufacturers

Presentation 2: Decarbonizing Energies & Chemical Plants with Electrification & Digitization

Presentation 3: Hydrogen power with gas turbines

Confirmed Speakers:



Robert Bruce Lung,
Senior Technical
Advisor at BGS, LLC.



Yasmine McColl, Global
Business Development
Leader for the Chemicals
Segment, Schneider Electric.



Senthil Kumar,
Technical Account
Manager for U.S. DOE's
Better Plants Program.



Shebin Jalal, Chief Solution
Architect and Global Process
Electrification Leader -
Energies and Chemicals,
Schneider Electric.



Jorge Lopez,
Power Systems
Development Mgr,
Siemens Energy



Ricky Dharani, Business
Development Director,
Siemens Energy

Additional details, including bios of the presenters, are available [here](#).

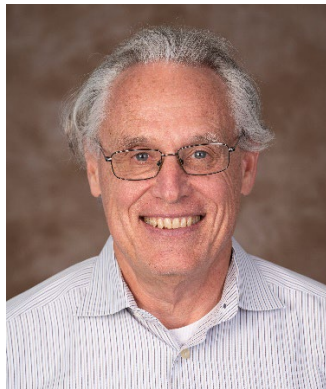
Further Ahead

We are working on two more events for this season - see preliminary below.

TIEEN Webinar

Our sister organization, the Texas Industrial Energy Efficiency Network, will present its annual collaborative webinar Wednesday, April 12, 2023, 2:00-3:30 pm (Central). This will be a panel discussion on the topic of *Industrial Energy Efficiency in a volatile, high price energy market*.

Confirmed panelists are:



Derek Reese, Policy Advisor for the American Petroleum Institute

Jamie Brick, Expert Engagement Manager at McKinsey



Registration is open [here](#).

Additional details, including more panelists, will be announced shortly.

TIEEP Water Forum

Date & Time: Thursday, May 4, 2023, 4:00-6:00 pm

Theme: *Energy Efficiency and Decarbonization in the Industrial Use of Water*

Venue: San Jacinto College Center for Petrochemical, Energy and Technology, 7901 Fairmont Parkway, Pasadena, TX 77507.

Cost: Attendance at the Water Forum is free.

Additional Details: Hybrid event. This event is co-hosted by TIEEP and STS-AIChE.

PDH certificates available.

Additional details will be announced shortly.

In Closing...

Thank you for taking the time to read along with us. We hope you found the information useful, and that you'll join us in our upcoming events.

If you would like to ensure that you receive all program updates and notices of upcoming events, please subscribe to our [mailing list](#).

If you have any questions, or difficulties with registration, or to request removal from this distribution list, please contact Li Lopez, llopez37@Central.UH.EDU or 713-743-7904.