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WELCOME

On behalf of the hosts and sponsors of the Forty-second National Industrial Energy Technology Conference (IETC), welcome! Our program brings together nationally prominent experts from many areas of industrial energy management. This year's virtual conference consists of ten technical sessions and panel discussions and over thirty individual presentations.

The IETC staff and your hosts, Texas A&M University System's Energy Systems Laboratory and the Louisiana Department of Natural Resources, along with our many co-sponsors are committed to providing all attendees with a wealth of information that will help them improve the performance of their companies--something to take home and use immediately!

We are confident that you will profit from the experience and technical expertise of our presenters and panelists, and best of all, the interaction with so many energy professionals in one place.

James A. Eggebrecht, PE, Executive Director
Industrial Energy Technology Conference

MAJOR EVENTS

Technical Sessions

The traditional technical sessions consist of 25-minute presentations followed by a 5-minute question and answer period after each presentation.

Panel Discussions

Panel discussions provide an overview by a select group of authorities on the subject. The moderator will lead the discussion on the topic following the panelists presentations. This format allows more in-depth coverage and discussions, and provides more interaction with the audience.

ADDITIONAL INFORMATION

Continuing Education & Professional Development Credits

The Industrial Energy Technology Conference and the workshops meet the criteria for continuing education and professional development hours required by many state professional engineering boards. Check with Kimberly or Jim at the registration desk for information and a CEU form.

CONFERENCE SESSIONS

Tuesday Morning, December 8

9:00 a.m.-11:55 a.m. Session 1

Session 1 → Equipment Improvements

Session Chair: Elizabeth Pavone, Chemical
Engineering Progress

- 9:00-9:30 “Compare 2 Fixed Orifice Venturi Products to a Variable Orifice Free Float Steam Trap,” James R. Risko, TLV Corporation.
- 9:35-10:05 “Improving Efficiency of Crude Heaters” Bijal V. Gangar, Harsh Ghuge, and Ashutosh Garg, Furnace Improvement Services Inc.
- 10:05-10:15 Breaktime
- 10:15-10:45 “Long Term Evaluation of Electricity Savings of the On-demand Industrial Ventilation Installations,” Ales Litomisky, Ecogate, Inc.
- 10:50-11:20 “Energy Savings of Motor Speed Control in an Airplane Painting Hanger: A Case Study,” Peng Solomon Yin and Terrence Chambers, University of Louisiana - Lafayette.
- 11:25-11:55 “Cooling Water System Optimization is a Significant Contributor for Environmental Improvement,” Mustafa Kamal Hashim, Saudi Aramco.

Tuesday Afternoon, December 8

1:00 p.m.-3:55 p.m. Session 2

Session 2 → Improving Facility Resiliency and Reducing Costs

Session Chair: James Eggebrecht, Energy Systems Laboratory TAMU System

- 1:00-1:30 “Energy Storage in Automotive Industry Applications,” John Andrepont, The Cool Solutions Company.
- 1:35-2:05 “Power Generation Capacity Enhancement of an Industrial Facility’s Cogeneration System,” AbEduhrahman Hazazi and Zeeshan Farooq, Saudi Aramco
- 2:05-2:15 Breaktime
- 2:15-2:45 . “Two Birds With One Stone – How Industry Becomes More Resilient and Reduces Costs with CHP,” Gavin Dillingham, HARC SouthCentral CHP Technical Assistance Partnership.
- 2:50-3:20 “Evaluating the Technical and Economic Opportunity for Solar Industrial Process Heat,” Carrie Schoeneberger and Jingyi Zhang, Northwestern University, Eric Masenet, University of California - Santa Barbara, and Colin McMillan, Parthiv Kurup, and Robert Margolis, National Renewable Energy Laboratory

Wednesday Morning, December 9

9:00 a.m.-11:20 a.m. Session 3

**Session 3 → Compressed Air System
Engineering Best Practices**

Session Chair: Tim Dugan, Compression
Engineering Corporation

- 9:00-9:30 “Best Practices for System
Engineering, Supply Side,” Tim
Dugan, Compression Engineering
Corporation.
- 9:35-10:05 “Best Practices for Automation,
Supply Side,” Robert McCowan,
Case Engineering Inc.
- 10:05-10:15 Breaktime
- 10:15-10:45 “Best Practices for System
Engineering, Demand Side,” Josh
Wamser, Industrial Compressor
Solutions.
- 10:50-11:20 “Best Practices for System
Measurement, Demand Side,”
Chuck Mayes, VP Instruments.

Wednesday Afternoon, December 9
1:00 p.m.-2:45 p.m. Sessions 4 & 5

**Session 4 → American Chemistry Council
Award Winners 1**

Session Chair: Lloyd Webb, Olin Corporation

- 1:00-1:30 “Arkema Calvert City Energy
Program,” Abdel Ramadane and
Dwight Stoffel, Arkema Inc.
- 1:35-2:05 “Loading the More Efficient
Column.” Kelsey Bailey. Eastman
Chemical Company.

- 2:05-2:15 Breaktime
- 2:15-2:45 “Olin Freeport Bisphenol-A
Energy Efficiency,” Michael
Mantas, Olin Corporation.

**Session 5 → Generating Value While Reducing
Energy and GHG Panel Discussion**

Session Chair: Ed Rightor, American Council for an
Energy Efficient Economy

- 1:00-1:30 “Quantifying and Incentivizing the
Indirect Effects of This Industrial
Process Innovations,” Eric
Masenet, University of California-
Santa Barbara.
- 1:35-2:05 “Making Cents of Carbon,” Heidi
Holmes, Dow Chemical.
- 2:05-2:15 Breaktime
- 2:15-2:45 “Preserving Cash Post-COVID-19
by Pursuing Efficiency,” Ed
Rightor, American Council for an
Energy Efficient Economy.

Thursday Morning, December 10
9:00 a.m.-10:45 a.m. Sessions 6 & 7

**Session 6 → American Chemistry Council
Award Winners 2**

Session Chair: Sharon Nolen, Eastman Chemical
Company

- 9:00-9:30 “Boiler 23 & 24 Efficiency Improvement,” Marcus Johnson, Eastman Chemical Company.
- 9:35-10:05 “Washington Works Steam and Electricity Conservation,” Michael Chisholm, DuPont Company.
- 10:05-10:15 Breaktime
- 10:15-10:45 Oxidizer Natural Gas Reduction, Morgantown NC Facility,” Frank Panna, Hexion Inc.

Session 7 → Tools for Efficiency Improvements

Session Chair: Tom Wenning, Oak Ridge National
Laboratory

- 9:00-9:30 “Reducing Energy Cost through the Use of Digital Twin Technology,” Benoit Janvier, Enero Solutions.
- 9:35-10:05 “Maximizing Meter & Invoice Data to Optimize Facilities – Alerts, Benchmarking, KPIs, M&V and More,” Andy Anderson, EnergyWatch LLC.
- 10:05-10:15 Breaktime
- 10:15-10:45 “MEASUR,” Kristina Armstrong, Oak Ridge National Laboratory.

Thursday Afternoon, December 10

1:00 p.m.-2:05 p.m. Session 8

Session 8 → Strategic Energy Management

Session Chair: R. Bruce Lung, U. S. Department of Energy

1:00-1:30 “Strategic Energy Management,”
Mike Stowe, Advanced Energy.

1:35-2:05 “TVA’s Strategic Energy
Management Program,” Tim
Campbell, Tennessee Valley
Authority.

Friday Morning December 11

9:00 a.m.-10:45 a.m., Session 9

Session 9 → Water & Energy: The Deep Connection

Session Chair: Mike Stowe, Advanced Energy

9:00-9:30 “The Energy-Water Connection, an
Overview,” Mike Stowe,
Advanced Energy

9:35-10:05 “Applied Water and Energy
Integration,” Susanna Sutherland,
Sutherland & Associates, LLC.

10:05-10:15 Breaktime

10:15-10:45 “Rural Water Usage and Electrical
Power Options,” Dale Friesen,
Single Phase Power Solutions.

Friday Afternoon, December 11

1:00 p.m.-2:45 p.m. Session 10

Session 10 → Program Efforts Towards Energy Efficient Operations

Session Chair: Brett Rasmussen, Nissan North America

1:00-1:30 “U. S. Department of Energy (DOE) Advanced Manufacturing Programs and Their Impacts,” Lindsay Steele, Pacific Northwest National Laboratory.

1:35-2:05 “Update on Better Plants Partners are Performing in the Better Buildings/Plants Waste Reduction Pilot,” Bruce Lung, U.S. Department of Energy, Ethan Rogers, ORAU, and Sachin Nimbalkar, Oak Ridge National Laboratory.

2:05-2:15 Breaktime

2:15-2:45 “Industrial Energy Efficiency Can Help Gulf Coast Communities Meet Clean Air Rules,” Andrew Whitlock, American Council for an Energy Efficient Economy.

IETC STAFF AND ADVISORY BOARD

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Kimberly Greer, Conference Manager

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