



INDUSTRIAL COMBUSTION SYMPOSIUM

SEPTEMBER 15 – 17, 2025

**Embassy Suites
San Antonio Riverwalk
San Antonio, TX**

PROGRAM & REGISTRATION INFORMATION

AGENDA

MONDAY, SEPTEMBER 15

6:00 – 8:00 PM WELCOME RECEPTION

TUESDAY, SEPTEMBER 16

7:00 AM – 3:30 PM REGISTRATION OPEN

8:00 – 8:30 AM OPENING REMARKS

8:30 AM – NOON MORNING PRESENTATIONS

Hydrogen Operational Safety in Unclassified Industrial Spaces

Development and Performance Assessment of a Pilot Unit for the Entrained Flow Gasification of Low-grade Feedstock

Burner Design Optimization for Steam-methane Reforming

Ammonia Flaring and the Effects of Hydrogen Enrichment in Ammonia Mixtures

Evaluation of Co-firing Ammonia with Natural Gas in a Refractory Lined Burner Test Facility for Application to a Batch Annealing Furnace

Industrial Ammonia Burner and Modeling Capability Development

NOON – 1:00 PM LUNCH

1:00 – 4:30 PM AFTERNOON PRESENTATIONS

Increase Fired Heater Capacity and Reduce NO_x Emissions Using Xceed™ Technology

The All Too Common Disconnect Between Heater Design, Instrumentation, DCS Logic and Operator Response

Ultra-low NO_x Combustion Retrofit of Heavy Crude Oil Heater

Next-generation Burner Implementation in a Retrofitted Crude Heater: Lessons in Capacity Expansion and NO_x Reduction

Unsupervised Naturally Aspirated Pilot Experiences

Practical Application of an Efficient 2 ppm NO_x Burner in a Fired Heater

4:30 – 6:00 PM AFRC BUSINESS MEETING

7:00 – 9:00 PM SYMPOSIUM DINNER

WEDNESDAY, SEPTEMBER 17

8:30 AM – NOON MORNING PRESENTATIONS

Adaptive Low Temperature Oxyfuel Burner for Enhanced Efficiency and Reduced NO_x Emissions in Non-ferrous Melting

Numerical Analysis of Hydrogen Substitution Effects on Heat Transfer in a Test Furnace With a Staged Oxyfuel Burner

CFD Modeling of Burner Retrofits for Hydrogen Fuel and Oxygen Enrichment in a Reheating Furnace

Dynamics of a Liquid Seal

Compact Portable Combustors for Pipeline and Equipment Blowdown

Flare Header Consolidation: A Risk Survey

NOON – 1:00 PM LUNCH

1:00 – 5:00 PM AFTERNOON PRESENTATIONS

Case Studies of Thermoacoustic Vibration in Sulfur Recovery Unit Reaction Furnaces

Why CO Boilers Have So Many Operating Problems

Mitigating Methane Emissions from Industrial and Large Commercial End Use Equipment

CFD Based Evaluation of Start-Up Operation in an Ethane Pyrolysis Furnace to Mitigate Potential of Forming Unburned Explosive Mixtures

Prediction of Methane Destructive Efficiency of a Gas Flare using CFD with Adaptive Mesh Refinement and Detailed Chemistry

Insights into Flame Temperature, Stability and Emissions of Lean Premixed Producer Gas Burner: Numerical and Experimental Combustion Analysis for Renewable Heat Generation

Numerical Simulations and Experimental Validation of Swiss-roll Combustor Using Coupled 3D CFD, CHT and Combustion Chemistry

5:00 – 5:10 PM CLOSING REMARKS

Program content as of June 13, 2025.

Review the program at afrc.net/symposium for future program updates.

DETAILS

REGISTRATION INFORMATION

REGISTRATION FEE: \$775 through August 31
\$875 after August 31

REGISTRATION INCLUDES:

- Admission to all Symposium sessions
- AFRC Business Meeting
- Welcome Reception on Monday evening.
- Refreshment breaks each day.
- Lunch on Tuesday, and Wednesday.
- Dinner on Tuesday Only.
- Access to papers online after the Symposium concludes.

REGISTER AT [AFRC.NET/SYMPOSIUM](https://afrc.net/symposium)



HOTEL & TRAVEL INFORMATION

**EMBASSY SUITES BY HILTON
SAN ANTONIO RIVERWALK DOWNTOWN**

125 E. Houston Street
San Antonio, TX
210-226-9000

ROOM RATES

\$213 per night; inclusive of 1.78% city fee, exclusive of taxes. Rate includes complimentary breakfast.

RESERVATION REQUIREMENTS

A credit card is required to guarantee individual reservations when booking.

HOTEL RESERVATION CUTOFF

The hotel will offer our discounted group rate until **August 25**. Reservations booked thereafter will be on a space and rate availability basis.

HOTEL CANCELLATION

Reservations must be cancelled at or before 11:00 AM CDT, 72 hours (3 days) prior to arrival to avoid a cancellation penalty.

CLICK HERE TO MAKE A HOTEL RESERVATION

AIRPORT

San Antonio International Airport (SAT) is approximately 9 miles from the Embassy Suites by Hilton San Antonio Riverwalk Downtown. Taxis and ride-share options (Uber/Lyft) are the best way to reach the hotel. SAT is serviced by the following airlines:

- AeroMexico
- American Airlines
- Frontier Airlines
- Spirit Airlines
- United Airlines
- Volaris
- Alaska Airlines
- Delta Air Lines
- Southwest Airlines
- Sun Country Airlines
- Viva

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