

Program content as of July 8, 2022. Review the program on the AFRC website for future program updates.

## **MONDAY, SEPTEMBER 12**

6:00 - 8:00 PM WELCOME RECEPTION

## **TUESDAY, SEPTEMBER 13**

7:00 AM - 3:30 PM REGISTRATION OPEN

7:30 - 8:00 AM CONTINENTAL BREAKFAST

8:00 - 8:30 AM OPENING REMARKS

8:30 AM - NOON MORNING PRESENTATIONS

Hydrogen Mixtures on Industrial Burners Designed for Natural Gas

Radiant Wall Burner Design Improvements for Retrofit Applications

Reduced Order Model of a Lime Kiln for Fuel Switching

Combustion Emissions and Thermal Performance Impacts When Replacing Hydrocarbon Fuels with Hydrogen in Industrial Furnaces

Effect of Operating Parameters on Fired Heater Tube Skin Temperature Measurement Accuracy

Installation of Lean Premix and Remote Fuel Staging System in Industrial Process Heater for Next Generation NOx Emissions Control

NOON - 1:00 PM LUNCH

1:00 - 5:00 PM AFTERNOON PRESENTATIONS

Analysis of Burner Operation Inside an Enclosed Ground Flare

Validated CFD Parameters for Process Heaters

Capturing the Effect of Near-and Far-Field Dynamics on the Combustion Efficiency of Multi-point Ground Flares

A Chemical Kinetics Approach for Heavy Fuel Oils Gasification Modelling

Model-Based Design and Full-Scale Demonstration of an Oxy-coal Firing System with Undiluted Oxygen and Minimal Flue Gas Recycle

A Volume of Fluid Approach to Highly Viscous Fuels Injection Modeling

4:30 - 5:30 PM AFRC BUSINESS MEETING

6:30 PM - 9:00 PM SYMPOSIUM DINNER

### **WEDNESDAY, SEPTEMBER 14**

7:30 - 8:00 AM CONTINENTAL BREAKFAST

8:00 AM - NOON MORNING PRESENTATIONS

Investigative Approach to Address Thermoacoustic Vibration in Gas-fired Heaters and Boilers

ClearSign Core™ Process Burners and Boiler Burners - Burner Scaling and Field Results

A Bayesian Decision-Theory-Based Digital Twin for Methane Flares

Multi-point Ground Flares – Recommended Design and Operation Guidelines

**Decarbonizing: The Future of Hydrogen Firing** 

**Ammonia for Industrial Combustion** 

The Firing of Liquid Bio-derived Fuels for Decarbonization of High Temperature Industrial Heating Processes

**NOON - 1:00 PM LUNCH** 

1:00 - 4:00 PM AFTERNOON PRESENTATIONS

#### Special Session on Industrial Flares

Texas Progress in Flaring - 6 Years of Emissions Data 2015-2020

Explaining the "Three Inch Rule:" Why Model Flares Don't Match Full-Scale

**Quantifying Flare Emmissions Using Hyperspectral Imaging** 

Non-equilibrium Plasma Driven Control of Flaring Emissions: From Computational Modeling Perspective

Clean Combustion, a Path to Net Zero

4:00 PM - 5:30 PM FLARE PANEL DISCUSSION

5:30 PM - 5:40 PM CLOSING REMARKS

5:40 PM SYMPOSIUM CONCLUDES

## **REGISTER TODAY** afrc.net/symposium

## REGISTRATION INFORMATION

**REGISTRATION FEE: \$550** 

#### **REGISTRATION INCLUDES:**

- Admission to all Symposium sessions
- AFRC Business Meeting
- Special session on industrial flares
- Welcome reception on Monday, September 12
- Continental breakfast and breaks Tuesday, September 13 and Wednesday, September 14
- Lunch on Tuesday, September 13 and Wednesday, September 14
- Dinner on Tuesday, September 13
- Access to papers on-line after the Symposium concludes

#### REGISTER AT AFRC.NET/SYMPOSIUM



# HOTEL & TRAVEL INFORMATION

#### **WESTIN POINSETT GREENVILLE**

120 South Main Street Greenville, SC 29601

#### **ROOM RATES**

\$189 plus tax

#### RESERVATION REQUIREMENTS

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

#### HOTEL RESERVATION CUTOFF

The hotel will offer a discounted group rate until August 22. Reservations booked thereafter will receive the group rate if the hotel is not sold out.

#### HOTEL CANCELLATION

Reservations must be cancelled 48 hours (2 days) prior to arrival to avoid a cancellation penalty of one night's stay.

#### **HOTEL PARKING**

\$7/day self; \$20/day valet

#### **HOTEL SHUTTLE**

The Westin Poinsett Greenville offers a free shuttle from the Greenville-Spartanburg International Airport. Please call ahead to arrange pickup, 864-421-9700. The shuttle runs from the airport to the hotel from 9:00 AM to 9:00 PM on the hour and from the hotel to the airport from 8:30 AM to 8:30 PM on the half hour.

#### **CLICK HERE TO MAKE A HOTEL RESERVATION**

#### **AIRPORT**

The Westin Poinsett Greenville is 13 miles from Greenville/ Spartanburg International Airport (GSP). The hotel offers a free shuttle to/from the airport.

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