## AIChE Baton Rouge Spring / 2018 Seminar

## <u>Combustion Technology Seminar</u> + Engineering Ethics

MORNING SESSION: Thermal Oxidation Technologies / NOx Minimization / Flameless Thermal Oxidation Technologies / Bio Oxidation

#### **Topic Description**

#### **Design Fundamentals for Oxidation Technologies**

An overview of common oxidation technologies, the input/output information required to select the correct oxidation technology for the application and the typical design parameters used to properly design and engineer an oxidation system. The presentation will cover the basic fundamentals and associated steps required to develop a compliant system.

#### Multi-Stage Thermal Oxidizer - NOx minimization

General overview of the need to reduce NOx emissions, NOx formation mechanisms and how to minimize NOx formation within the combustion process with primary focus on Multi-Stage Thermal Oxidation. Basic description of the technology, its functionality and how it effectively reduces NOx emissions.

#### Flameless Thermal Oxidation - An Innovative Technology

An overview of the technology, design parameters, functional characteristics and the performance values. A high removal efficiency, 99.9999% DRE and very low NOx emission levels, < 1ppmv.

#### **Bio-Oxidation Technology for the treatment of Industrial Air**

Basic technological overview, functionality, and general operational parameters needed to successfully treat air borne VOC's biologically.

# AFTERNOON SESSION: New Flare Compliance Regulations for Refineries / Flare Monitoring Technologies / Engineering Ethics

#### **Topic Description**

<u>Flare Compliance Regulations</u> – Overview of New Flare Compliance Regulations for Refineries A Consultant's Presentation: Your refinery only has until January 30, 2019, to bring your flares into compliance with new § 63.670 "Requirements for Flare Control

#### Flare Monitoring Systems

There was no instrument that could directly monitor flare performance and provide feedback to optimize flare operations. A new technology has been developed to answer this challenge. The new technology is called "Video Imaging Spectral Radiometry" (VISR). VISR monitors flare combustion efficiency directly, remotely, autonomously, and continuously. It also monitors smoke in the flare flame. With both combustion efficiency and smoke level information, operator can achieve "incipient smoke point" operation, which has the highest combustion efficiency without smoke, and have lowest energy consumption and emissions. VISR can be integrated into flare instrumentation to achieve close loop control.

#### **Engineering Ethics**

A Presentation on Engineering Ethics

## Combustion Technology Seminar + Engineering Ethics

Friday, May 18, 2018 8:00AM – 5:00PM

Location: Oak Lodge Reception & Conference Center

2834 S. Sherwood Forest Blvd. Suite E-1 Baton Rouge, Louisiana 70816, (225) 291-6257

## Earn 8 PDH's! Enrollment is Limited! Sign-Up Early!

### **REGISTRATION FORM**

NEW! Register online at <u>www.aiche-br.org</u> and pay by credit card using PayPal, or mail this completed form with payment to the address below.

NAME:		_	
MAILING ADDRESS:		_	
CITY:	STATE:	ZIP:	
COMPANY:		_	
EMAIL:		PHONE:	
TECHNICAL/PROFES	SSIONAL SOCIETY MEMBER	RSHIP*:_(must indicate)	_
COST: (Please check appropriate box)		of Society Members* prior to 13-May-18 n/Prof Society Members prior to 13-May-1 13-May-18	8
(Please include check if that	dit cards on event day	Armand Melikyan (Seminar Coordinator P.O. Box 84787 Baton Rouge, LA 70884 Email: armand_melikyan@hotmail.com Phone: (225) 773-0468	•

\*The AIChE supports membership in Professional and Technical Societies (see list below)

<u>Refund Policy</u>: Advance registration is 100% refundable with notice at least 12 days prior to the date of the seminar. Notice received between 09-May-2018 and 17-May-2018 is 50% refundable. No refunds on day of the seminar. <u>Cancellation</u>: AIChE reserves the right to cancel this seminar if low attendance is projected. A full refund will be sent in this event.

**EVENT: Combustion Technology Seminar (7 PDHs)**;

+ Engineering Ethics (1 PDH)

**DATE: May 18th, 2018** 

PROPOSED AGENDA:

7:30 A - 8:00 A Breakfast

8:00 A -11:30 A Thermal Oxidizers (PCC Combustion /ONYX)

11:30 A - 12:30 P Lunch (provided by AIChE)

12:30 P – 1:30 P New Flare Compliance Regulations for Refineries (Providence)

1:30 P - 4:00 P Flare Monitoring Systems (Providence)

4:00 P - 5:00 P Engineering Ethics (Jacobs)

#### Presenters:

Mr. Scott Burge, Vice President Sales/Application Engineering
Process Combustion Corporation – Oxidation Technologies
Email: sburge@pcc-group.com | Phone: (412) 655-0955 | www.pcc-group.com
Scott has been with PCC for 29 years working in the areas of Project Management, application engineering and sales. He has worked on the advancement of the combustion technologies to include air heaters, thermal oxidation and regenerative technologies.

Mr. Nick Disanti, Product Manager, Flameless Oxidation

Process Combustion Corporation – Oxidation Technologies

Email: ndisanti@pcc-group.com | Phone: (412) 655-0955 | www.pcc-group.com

Nick holds a B.S. Degree in Chemical Engineering from the University of Pittsburgh with a Master's in Business Administration from Penn State. He has significant experience in combustion application engineering and has been instrumental in the optimization and commercialization of PCC's Flameless Thermal Oxidizer technology.

Mr. Michael Foggia, Business Development/Marketing Manager
Process Combustion Corporation – Oxidation Technologies
Email: mfoggia@pcc-group.com | Phone: (503)799-2372 | www.pcc-group.com
Mike has 30 years of experience in the technical marketing and business development functions associated with air pollution control equipment. The past 10 years have been focused on thermal and biological technologies.

Mr. Robb Pulaski, President/CEO of ONYX Process Equipment
Email: robb@onyxequipment.com | Phone: (214)415-1979 | ONYX Process Equipment, LLC
With over 30 years of experience in the industrial, refining, chemical, power, paper, and
environmental controls industries, Robb has significant knowledge specific to the design and
implementation of process solutions needed to address complex emissions projects.

Dr. Yousheng Zeng Ph.D. P.E. serves as Chief Executive Officer of Providence Photonics and a Board Member of Providence Holding Inc.

Dr. Zeng received his Ph.D. degree in Environmental Engineering in 1990 from the University of Illinois at Urbana-Champaign. He is an author/co-author of 21 peer-reviewed journal articles and an inventor/co-inventor of 15 patents or pending patents. He was adjunct professor from 1996 to 2001 at Southern Methodist University teaching graduate level courses on air pollution control. Dr. Zeng served on three committees/panels under the U.S. EPA Science Advisory Board. In recent years, he has been working on Infrared imaging based technologies to detect, measure, and control hydrocarbon emissions.

Mr. Jimmy Orr, P.E. – Jacobs Engineering / AIChE BR Sect Committee Member Jimmy has 40+ years of experience in the Gulf Coast Chemical Industry. He is currently a Group Leader for Safety Valve validations at Jacob Engineering (Baton Rouge). He is a successful coach & mentor for young engineers. His experience includes Plant Operations, Process Research, Project Management, and detailed Process Design. Jimmy is an expert in the design & management of small in-plant improvement projects. He is a graduate from Univ. of Houston (BSChE 1974) and Texas A&M (MSChE 1978). Jimmy is a licensed Professional Engineer in Louisiana. He is co-author of one US Patent.

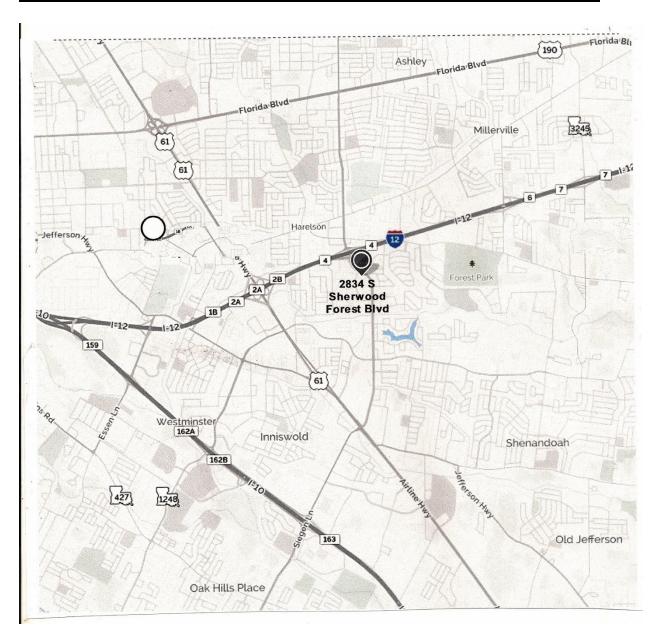
The morning session will cover fundamentals and latest technologies on thermal oxidation and NOx minimization and also will include flameless thermal oxidation and bio oxidation. The afternoon session will cover the latest on the new flare compliance regulations for refineries and following will be a presentation on latest flare stack monitoring system technologies. The seminar concludes with a presentation on Engineering Ethics (1 PDH).

Note: Some topics may change without prior notice.

Notice: Full day registration only. Registration fees will not be reduced for half day attendance. Attendance signatures will be required at the beginning of each presentation. PDH (Professional Development Hour) certificates will be issued based upon attendance list signatures, with Hours reflecting actual attendance. Fees will not be reduced or partially refunded for partial attendance.

<sup>\*\*\*</sup>Morning and Afternoon Sessions each to include two or three 10 min. breaks (not shown) \*\*\*

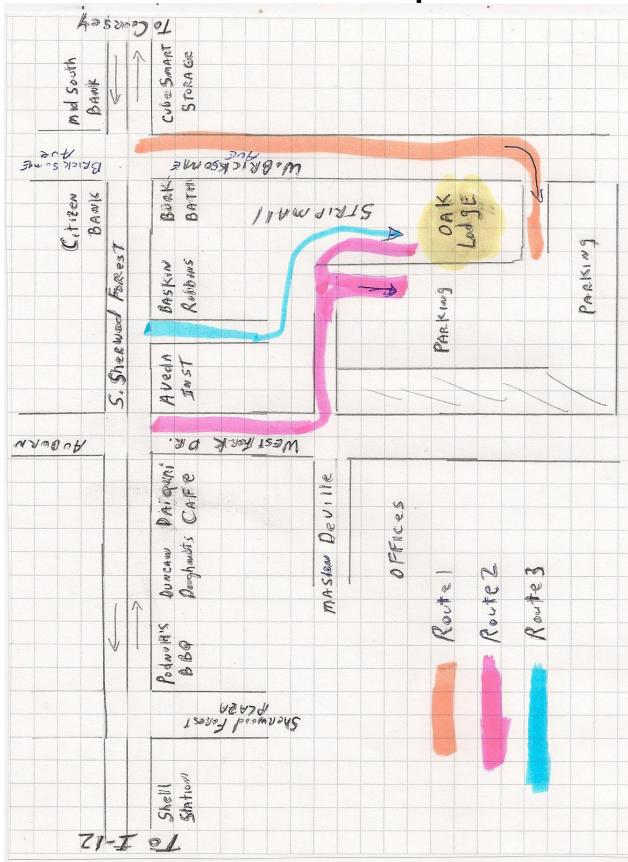
## (Map to Oak Lodge (2834 S.Sherwood Forest Blvd. Baton Rouge, LA 70816)



"Oak Lodge" is a little bit hard to find

Please Reference the next Map to Find "Oak Lodge" in the Local Area

**Local Area Map** 



- Louisiana Engineering Society (LES)
- Louisiana Society of Professional Surveyors (LSPS)

#### **National Technical Societies**

- America Academy of Environmental Engineers (AAEE)
- American Institute of Architects (AIA)
- American Institute of Chemical Engineers (AICHE)
- American Institute of Electrical Engineers (AIEE)
- American Consulting Engineers Council (ACEC)
- American Concrete Institute (ACI)
- American Institute of Steel Construction (AISC)
- American Management Association
- American Iron and Steel Institute
- American Society of Mechanical Engineers (ASME)
- American Plywood Association (APA)
- American Society of Civil Engineers (ASCE)
- American Society of Engineering Education (ASEE)
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
- American Society of Safety Engineers (ASSE)
- American Wood Council (AWC)
- Earthquake Engineering Research Institute (EERI)
- Institute of Transportation Engineers
- Institute of Electrical and Electronics Engineers (IEEE)
- Instrumentation Systems and Automation Society (ISA)
- National Council of Examiners for Engineering and Surveying
- National Design Specification (NDS)
- National Society of Architectural Engineers
- National Society of Professional Engineers (NSPE)
- Society of Petroleum Engineers (SPE)
- Society of Petroleum Evaluation Engineers (SPEE)
- Society of Professional Well Log Analysts (SPWLA)
- Society of Women Engineers (SWE)
- Air & Waste Management Association (A&WMA)