

Baton Rouge Newsletter

Year 27, Number 3

www.aiche-br.org

November 1, 2016

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The AIChE Baton Rouge Newsletter is published monthly, from September to June, by the AIChE Baton Rouge Section, 110 Chemical Engineering, LSU, Baton Rouge, LA 70803. It is distributed free of charge to members of the Baton Rouge Section of the American Institute of Chemical Engineers.

Membership Fee: \$15.00/yr.

November Meeting

Date: Thursday, November 17, 2016

Place: El Magey Mexican Buffet, 8290 Siegen Lane (at the railroad overpass)

Speaker: David A. Patterson, AGI Industries.

Topic: Pump Applications and Optimization

Agenda: 5:30 PM – Registration and social

6:00 PM – Dinner 6:20 PM – Business 6:30 PM -- Speaker

Menu: Selection of Mexican foods, coffee, tea or soft drinks.

Cost: \$20 per person (Members \$15, Students \$10)

RESERVATIONS

Please make your reservation with chapter secretary, Donna Bryant, by 5:00 PM on Tuesday, November 15th at donna.bryant@syngenta.com

Show up at the door. Bring one or more friends.

Professional Engineering Certification

The subject of this meeting is an acceptable activity for continuing Professional Development as defined by LAPELS and is approved for one (1) PDH unit.

The Baton Rouge AIChE chapter is NOT responsible for individual record keeping of PDH credits. Certificates must be obtained at the meeting by the individual.

Other Upcoming 2016 Events / Speakers

Nov 11 Fall Seminar, Oak Lodge on Sherwood Forest Boulevard. Mixing, Economic Development, Safety Certification, Ethics Panel, more.

If you or your colleague(s) would like to give a technical presentation at an upcoming chapter meeting for 2 professional development hours (PDHs), please contact Chapter Chair, William Buck, at William.Buck@WinkEngr.com to schedule a meeting date and time.

Recap of the October Dinner Meeting



The speaker for the October meeting was Daniel Smith, leader of the Chemical Reactivity and Fundamentals Engineering group at Albemarle. Dan spoke on pure component physical property estimation methods. He said most methods are based on the principle of corresponding states, originally proposed by Van der Waals in 1873. The method consists of using reduced properties such as reduced temperature and density, plus one more such as acentric factor to estimate the properties of some components based on the experimentally determined properties of other components. The principle is that substances at the same reduced conditions are in corresponding states. He also discussed quantitative structure property models and group contribution methods. About a dozen methods were compared for accuracy in predicting several properties such as critical temperature, pressure and density and some of the methods were accurate within the accuracy of experimental determinations of these properties. The methods were better at estimating gas properties than liquid and transport properties.

High School Chemistry Awards



Our Vice-Chair Clark Snyder presented High School Chemistry Awards to four teams of teachers and students attending the October meeting. Two other schools receiving awards were not present at the meeting. The awards are given on the basis of merit to schools requesting them. This year some of the schools will use the awards to replace equipment and materials lost due to the historic floods suffered in the area in August. Proceeds for the awards come from the income the Section derives from the bi-annual seminars. Photos: Kathy Moise with student Andrew Taylor of Bethany Christian School, Alesia Cook and student Sarah Way of Central Baptist School, Micah Wax and student Sarah Hazelton of Denham Springs High School, Nadege Van Camp and student Hailey Van Camp of Southland Christian Academy.

November Meeting Speaker

David A Patterson has 36 years of experience in oil and gas production with expertise in pump failure analysis and applications. Currently he is with AGI Industries but has previously worked for Sulzer, Flowtronex and ProPump Inc. David is holds a BS in Engineering Technology for LSU.

November Meeting Topic

Do you have questions about pump life in your facility? How do you extend time between failures? How do you properly specify pumps for purchase? The presentation will focus on pump types, applications, optimization of performance, seals and reliability issues. Please come prepared with questions. AGI Industries offers centrifugal, metering and positive displacement pumps along with related products and services. You can learn more about AGI at the website http://www.AGIindustries.com.

Call for Nominations for 2017 Section Officers

Have you wanted to serve on the leadership for AIChE? Do you know someone who would be a perfect candidate for an officer's position? We are asking the membership now and up until our November meeting to submit names for our 2017 elections.

We have the following openings where we are requesting nominations

- 1) Vice Chair The position is very important to operations of the monthly meetings. This individual helps coordinate venues and helps with lining up speakers.
- 2) Secretary The position reports on executive committee meeting by publishing to the committee the activities, meeting minutes and action items. Additionally, the person serves to collect RSVP and keep attendance records of the monthly meetings.
- 3) Treasurer This individual will provide the bookkeeping for the chapter and submits annual reports to the executive committee.
- 4) Executive Committee This year there is one available opening on the executive committee that is up for election.

This is a perfect opportunity to get involved with your local chapter and help provide leadership.

To nominate a candidate please contact our Nominations Committee Chair Parul Patel, Parul.Patel@PROSYS.com.

Let your lives overflow with thanksgiving for all He has done.

Paul, Letter to the Colossians.

From the Chapter Chair's Pen

November - Thanksgiving is going to be upon us soon. As a local AIChE chapter we have a lot to be thankful for. Baton Rouge is one of the more active chapters across the country. We have great membership that participates and looks forward to attending our monthly meetings and activities. This month on November 11th is our Semi Annual seminar for PDH continuing education. This serves an important function for professional engineers but also is not just limited to chemical engineers. Many attendees of the seminar are from other disciplines such as mechanical, electrical or civil. I encourage you to attend if possible. Nov 17th is our next regular meeting. We will be accepting nominations for 2017 officers at the meeting and have a presentation from Philadelphia mixers. Serving as an officer is a great opportunity to help the chapter. We are blessed as a chapter and thankful for our success. Last month we awarded over \$3000 in high school grants to several local schools. We thank Clark Snyder for leading this program during the past year. As the holidays approach it's a time to reflect on the year's accomplishments for all of us. In the coming months continue your support for the engineering community and participate with local AIChE activities.









2016 Section Contacts

Officers

Chair:William Buck, William.Buck@WinkEngr.comVice Chair:W. Clark Snyder, WClarkSnyder@hotmail.comSecretary:Donna Bryant, Donna.Bryant@Syngenta.comTreasurer:Oscar Alfaro@Jacobs.com

Executive Committee Members

Glenn Bryson

Jimmy Orr

Noel Ricord

Stephen Reilly

Armand Malikum

BGBryson@BellSouth.net

Jimmy.Orr@Jacobs.com

LCNoel55@aol.com

Stephen.reilly@prosys.com

Armand Melikyan <u>Armand.Melikyan@WinkEngr.com</u>

Committees

Awards: Dal Dalferes, <u>Joseph.Dalferes@jacobs.com</u>
Communications: Brandon Lithgoe, <u>BLithgoe@Yahoo.com</u>
Education: Erick Flores, <u>EFlore5@LSU.edu</u>

High School Grants: W. Clark Snyder, WClarkSnyder@hotmail.com
Membership: Glenn Bryson, BGBryson@BellSouth.net
Newsletter: Armando Corripio, Corripio@LSU.edu
Nominations: Parul Professional Development: Parul Professional Development: Randy Goodman, Randy.Goodman@LA.gov

Seminars: Jimmy Orr, <u>Jimmy.Orr@Jacobs.com</u>

Sponsorship: Stephen Reilly, Stephen.Reilly@Prosys.com

Young Professionals: Staci Duhon, StaciDuhon@gmail.com

Why Should You Join the Local AIChE Chapter?

- 1. It is a welcoming presence to new chemical engineers in the area.
- It provides a neutral ground mentorship toward career directions and other life topics.
- 3. It facilities a better understanding of local, state, and federal policies related to our professions.
- 4. It offers a smooth transition for graduating chemical engineers from LSU, ULL, and other nearby universities who start working in the area.



Wink Engineering and

BROWN & ROOT

proudly support the AIChE

and congratulate Baton Rouge Chapter President, William D. Buck, P.E.

Forged from the Past. Engineered for the Future.

AIChE Baton Rouge Fall Seminar

<u>Fundamentals of Agitation, Gulf Coast Petrochemical Economy,</u> <u>Certified Process Safety Professional, Mascoat Insulation Coating,</u> <u>Design Pressure Basics, Engineering Ethics Overview</u>

Friday, November 11, 2016 8:00AM – 4:00PM

Location: Oak Lodge Reception & Conference Center (new)
2834 S. Sherwood Forest Blvd. Suite E-1 Baton Rouge, Louisiana 70816, (225) 291-6257
Earn 7 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 MEMBE	RSHIP*: (must indica	te)	
COST:	☐ \$85/person for Tech/Pro	\$85/person for Tech/Prof Society Members* prior to 06-Nov-16		
(Please check appropriate box)	se check appropriate box) \$95/person for non-Tech/Prof Society Members prior to 06-1			
	\$110/person for all after 06-Nov-16			
(Please include check if the Check or cash only, no cre	dit cards on event day	E	' Lakeview Dr. Baton Rouge, LA 70810	
Walk-ins welcome space p	ermitting.	E	Email:	

Phone: (818) 642-8003

Oscar.Alfaro@Jacobs.com

*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 01-Nov-16 and 10-Nov-2015 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.

Baton Rouge Section November 11, 2016 Seminar

7:00 AM - 8:00 AM: REGISTRATION & BREAKFAST SNACKS

8:00 AM - 9:50 AM: MORNING SESSION

Fundamentals of Agitation from a Mixing Solutions Provider

Evan Walters (Philadelphia Mixing Solutions)

The presentation will cover the basics of fluid mixing. These fundamentals drive the development of optimized in-tank mixing solutions. An overview of the presentation includes the following topics:

Principal Mixing Duties

- Blending / Heat Transfer
 - Newtonian
 - Non-Newtonian
- Solids Suspension
 - Solids / Liquid
 - Solids Dissolution
 - Solids Addition
- Dispersion
 - Liquid/Liquid
 - Gas/Liquid

Mixing Duty and Impeller Definition

Scale Up

Mechanical Design Basics

Question and Answers

About the presenter:

Evan Walters is the Business Development Manager for Philadelphia Mixing Solutions Ltd., with focus on Top Entry Chemical/Petrochemical applications. Evan has a BS in Mechanical Engineering from Wilkes University. He has 10+ years of experience in the field of fluid mixing. This experience includes Application Engineering, Project Management, Warranty Committee member, on-site commissioning/start-up assistance, and inside sales team management of high specification type projects. Evan recently moved from the head office in Palmyra, Pennsylvania to Houston, Texas to better support the Gulf coast region.

10:00 AM - 10:50 AM: MORNING SESSION

Gulf Coast Petrochemical Economy

Greg Upton, PhD (LSU Center for Energy Studies)

The petrochemical manufacturing industry has shaped the history of the Gulf Coast's economy. With the advent of shale oil and gas as well as the removing of the crude oil export ban, a number of potential opportunities and risks for this industry have emerged. This lecture will focus on the petrochemical manufacturing sector's importance to the Gulf Coast economy and provide insight into the economic viability of future industrial development.

About the presenter:

Gregory T Upton, PhD is Assistant Professor at the Center for Energy Studies, Louisiana State University. His research interests are related to the analysis of economic and public policy issues on energy and the environment. Dr. Upton is also a Research Associate at Acadian Consulting Group (ACG), for which he has four years experience in supporting expert analysis of economic, statistical, and public policy issues in energy and regulatory industries. During his tenure at ACG, Dr. Upton has worked on more than 20 regulatory cases in more than 10 states. He has worked on a wide range of issues including the impact of utility rate increases on economic output, the distributional effects of different types of utility rate designs, economic impact of new infrastructure programs, benchmarking analysis, economic valuation, and estimating the tax impact of large environmental disaster. Dr. Upton holds a Ph.D. in Economics from LSU where he also received both an M.A. in economics and a B.S in economics with a concentration in empirical analysis. He is a member of professional organizations such as the International Association of Energy Economics (IAEE), American Economic Association (AEA), and the Southern Economic Association (SEA).

11:00 AM - 11:50 AM: MORNING SESSION

CCPS Certification Process for Certified Process Safety Professional

Florine Vincik (BASF Geismar)

Over the past 30 years, CCPS has focused its global efforts in four key areas:

- Promoting process safety among industry leaders as a key business value,
- Serving as the leading and authoritative resource for process safety,
- Advancing and developing the Body of Knowledge (BOK) of process safety, and
- Educating professionals and supporting process safety education in universities.

CCPS now plans to leverage its efforts in the last two areas by establishing a professional credential – the Certified Process Safety Professional (CPSP). The CCPS certification process will evaluate the applicants' knowledge across the process safety Book of Knowledge (BOK), which over the past 30 years has been defined largely by CCPS, as well as DIERS, another AIChE Technical Entity. The BOK has CCPS's Guidelines for Risk Based Process Safety at its core and is supported by dozens of other CCPS books and supplemented with key standards developed by a number of organizations. The process of evaluation will be based on both career experience and assessment via a rigorous test. Successful certificants will then maintain their knowledge and expertise through a range of continuing professional development activities, including courses, conferences, committee participation, teaching, and others.

When hiring or planning the career development of a certificant, employers and those hiring consultants will have evidence that the CPSP they are evaluating has developed a basic level of experience in process safety and the certificant is committed to advancing his or her abilities.

This presentation will describe the process involved to become a Certified Process Safety Professional

About the presenter:

Florine Vincik has 30 years of chemical manufacturing experience in process, project, production, management, and now process safety. Bachelor of Science in Chemical Engineering (LSU), Master of Business Administration (SELU), Certification as both a Safety Professional (ASSE) and Process Safety Professional (CCPS). Provides the Engineering/Business/Safety 'trilogy' ideal for consulting with stakeholders about EHS and business risks as well as evaluating solutions. Co-author for AlChE's Center for Chemical Process Safety (CCPS) process safety guidance handbooks: Risk Based Decision Making Tools, Guidelines for Siting a Facility, Combustible Dusts, and peer review of Enabling Events and Conditional Modifiers for LOPA and The Student Handbook for Process Safety. Member of the Greater Baton Rouge AlChE and ASSE Chapters...Geaux 'Safety' Tigers!

12:00 PM - 1:00 PM: LUNCH

1:00 PM - 1:50 PM: AFTERNOON SESSION

Mascoat Insulation Coating

Robert Browning (Mascoat- Houston)

- History of Insulation Coatings
- General Overview of Mascoat
- Type of Coatings & Benefits of Each
- Case Histories
- Best Practices
- Questions / Answers

About the presenter:

Robert Browning is the Territory Manager for Eastern North America & the Caribbean for Mascoat Thermal Insulating Coatings. He is NACE CIP Level 2 Inspector, #51473. Also, a Certified General Contractor in FL. Robert has 15+ years in the coating industry. He has been successful from the supplier & contractor side of the industry. Prior to Mascoat, Robert operated R. Browning Enterprises, Inc. and was the V.P. of ICRI the SW Florida Chapter. Most recently he spoke at the NISTM Convention and the 24th annual Multi-Topic Engineering Seminar.

2:00 PM - 2:500 PM: AFTERNOON SESSION

Design Pressure Basics

Jimmy Orr (Jacobs Engineering)

- How to identify Maximum Operating Pressure
- Acceptable Pressure Margins
- Piping Design
- Questions / Answers

About the presenter:

Jimmy Orr has worked 40+ years in the Gulf Coast Chemical Industry. His experience includes Plant Operations, Project Management, and Detailed Process Design. Jimmy is currently a Group Leader for Safety Valve validations at Jacob Engineering (Baton Rouge). He is a graduate from Univ. of Houston (BSChE 1974) and Texas A&M (MSChE 1978).

3:00 PM - 4:00 PM: AFTERNOON SESSION

Engineering Ethics Overview

Richard Savoie, P.E. (LAPELS Deputy Executive Director)

- LAPELS Board and Staff
- Enforcement & Compliance
- Ethical Issues
- Quiz
- Supervising Professionals
- Common Questions

About the presenter:

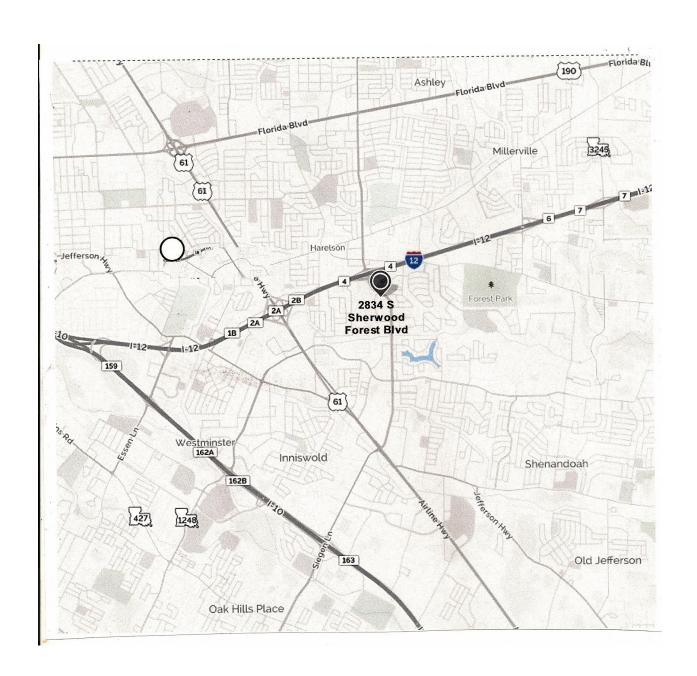
Richard Savoie is the Deputy Executive Director for the Louisiana Professional Engineers and Land Surveyor's Board (LAPELS). He has served in the position since April 2015. He also served one term as a Board Member from 2007 to 2013.

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.

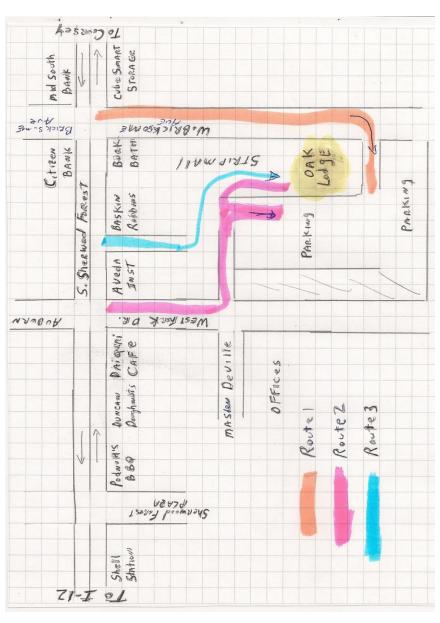
***Morning and Afternoon Sessions each to include two or three 10 min. breaks (not shown) ***

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



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

IV Local Area Map



Local Professional Societies

- 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)