



Baton Rouge Newsletter

Year 25, Number 3

www.aiche-br.org

November 1, 2014

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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: Tuesday, November 11, 2014

Place: Ralph & Kacoo's, 6110 Bluebonnet Blvd., Baton Rouge, 70809

Speaker: Mr. Jason Sowels, Business Development Manager, Reagan Power and Compression

Topic: *(To be determined but not provided at the time of newsletter publication)*

In addition to our monthly technical presentation, the chapter will also be presenting our annual high school chemistry classroom grants to our selected winning applications.

Agenda:
5:30 PM - Social hour
6:00 PM - Dinner begins with presentation of high school classroom grants
6:30 PM - Speaker begins
7:15 PM - Meeting adjourns

Menu: A sensation salad followed by a choice entrée and an optional dessert

Cost: \$25 per AIChE member (\$30 per guest, \$10 per AIChE student member)

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.

RESERVATIONS

Please make your reservation with Chapter Secretary, Brian Hoppe, **by 4:30 PM on Saturday, November 8, 2014** at Brian.Hoppe@Willbros.com or by calling 225-612-6234.

Upcoming Events / Speakers

11/22:	Geaux Build (Community service event w/ LSU AIChE)
12/18:	Mr. John Willis, Vice President of ADCO Companies LTD, at Teppanyaki
01/22:	TBD
02/19:	TBD
03/19:	TBD
04/23:	BASF at Geismar site

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 Vice Chair, Stephen Reilly, at stephen.reilly@prosys.com to schedule a meeting date and time.

Super Science Saturday 2014 Recap

The LSU Chemistry Department, American Chemical Society, and LSU Athletic Department hosted Super Science Saturday, an annual all-ages event with hands-on chemistry and science demonstrations, on Saturday, October 11th at the LSU Pete Maravich Assembly Center. AIChE had a booth at the event and was represented by members Lauren Hartley, Jimmy Orr, Cameron Proper, Stephen Reilly, Wen Zhang, and several LSU AIChE members. Our booth made gumdrop molecules and blew up balloons with pop rocks, both of which were extremely popular with the kids. One parent even mentioned we had the best booth at the event! 1,141 students (with ages ranging from preschool to high school) and 2,000 parents attended the event and were introduced to chemistry with hands-on demonstrations. -- **Lauren Hartley**, B.R. Chapter Education Chair



October 2014 Meeting Recap

Mr. Dallas Cooley gave a great presentation at the joint AIChE professional/student chapter meeting at LSU campus. He reflected upon both his personal experiences and observations of transitioning from a student to a professional. He noted that communication is critical in the professional world, whereas this skill is often left out in academic curriculum. He encouraged young engineers to take on extracurricular activities to cultivate good communication skills. He also encouraged keeping an open mind and getting out of our comfort zones. The meeting was very insightful, and it was an additional delight to sample Jeaux Boys's BBQ sauce on the food Dallas provided! -- **Brian Hoppe**, B.R. Chapter Secretary

Geaux Build Announcement

LSU AIChE and 7 other student organizations at LSU are hosting an engineering-wide service day, Geaux Build, on **November 22, 2014**. Our goal is to get engineering students involved in giving back to the community by performing tasks unique to our skill sets. We will most likely be servicing elderly citizens in need of assistance in completing tasks that they are unable to do themselves. Jobs of the day may include building wheelchair ramps, replacing exterior siding, and general outdoor building maintenance. Our target volunteer base is 150 students along with faculty and industry representatives.

For those of you in the Baton Rouge area, especially past AIChE members and LSU alumni, we encourage you and your coworkers to join our students on that Saturday.

For those not in the Baton Rouge area, but would like to be a part of this event, the LSU chapter will be taking sponsor donations for the event to pay for T-shirts, food, and building tools. Your company logo(s) will appear on any merchandise made for this project.

Email aiche@lsu.edu or smarch3@tigers.lsu.edu as soon as possible if you are interested in participating.

-- **Amiel Kirtikar**, LSU Chapter President



Glenn Young & Associates LLC

SUPPORTS THE

AIChE Baton Rouge Section

OFFERING PROCESS SAFETY SERVICES SINCE 2000 INCLUDING:

- Process Hazard Analysis Facilitation
- Process Safety Auditing
- Risk Analysis Facilitation including LOPA & Event-Tree
- Safety Instrumented System Selection Facilitation

g.young.g@gmail.com

Call for 2015 Officer Nominations

If you or a chemical engineering colleague living in the Baton Rouge area is a member of the both the local and national sections of the American Institute of Chemical Engineers and would be interested in serving the Baton Rouge chapter beginning January 1st, 2015, submit your nomination to our Nominations Committee Chair, Glenn Young, via e-mail at g.young.g@gmail.com today!

For more information on the Baton Rouge chapter and various officer and committee roles, visit <http://www.aiche-br.org/aboutus.shtml> at your convenience.

Nominations will be accepted up until the December 18th meeting, during which elections will be held.

Looking to promote an upcoming job opportunity, conference, or other company event?

Consider sponsoring the Baton Rouge AIChE chapter to get newsletter and website exposure and recognition, among other chapter benefits! If interested, please send an inquiry to chapter Vice-Chair, Stephen Reilly, at stephen.reilly@prosys.com to find out more.

2014 Section Contacts

Officers

Chair:	Jimmy Orr, Jimmy.Orr@Jacobs.com
Vice Chair:	Stephen Reilly, Stephen.Reilly@ProSys.com
Secretary:	Brian Hoppe, Brian.Hoppe@Willbros.com
Treasurer:	Oscar Alfaro, Oscar.Alfaro@Jacobs.com

Executive Committee Members

Glenn Bryson	BGBryson@BellSouth.net
Dal Dalferes	Joseph.Dalferes@Jacobs.com
Louis J. Thibodeaux	Thibod@LSU.edu
W. Clark Snyder	WClarkSnyder@hotmail.com
Armand Melikyan	Armand_Melikyan@hotmail.com

Committees

Awards:	Cameron Proper, cameron.proper@momentive.com
Education:	Lauren Hartley, LHartley@TrinityConsultants.com
High School Grants:	W. Clark Snyder, WClarkSnyder@hotmail.com
Newsletter:	Armando Corripio, Corripio@LSU.edu
Nominations:	Glenn Young, g.young.g@gmail.com
Public Relations:	Ken Campbell, kencamp99@yahoo.com
Communications:	Brandon Lithgoe, blithgoe@yahoo.com
Professional Development:	Randy Goodman, Randy.Goodman@LA.gov
Seminars:	(OPEN POSITION)

Why Should You Join the Local AIChE Chapter?

1. It is a welcoming presence to new chemical engineers in the area.
2. It provides a neutral ground mentorship toward career directions and other life topics.
3. It facilitates 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 work in the area.

From the Editor's Desk

Dallas Cooley gave a very interesting talk at the October meeting on the soft skills required by chemical engineers, basically communication skills and the ability to sell themselves. He mentioned several memorable flops in communication one of which was the introduction of "New Coke" by the Coca-Cola Company in the 80's. I remember a story about that. I heard that when the company officers were asked how come their market research was so wrong they answered, "We are not that dumb." Then they asked them if it had all been planned, given that the sales of "Coca-Cola Classic" were going through the roof they answered, "We are not that smart." At the meeting the food was so delicious my wife and I had seconds. Dallas told us the meat and the baked beans had been cooked with the BBQ sauce he markets in partnership with his brothers, *Jeaux's Boys (JB)*. He told me you can find it at Calandro's and other local markets. I put extra sauce on our meat.

How do you like the new look of the newsletter? After 24 years with the same look Stephen Reilly has taken the new AIChE logo and built a very attractive new look for the newsletter. I was thinking of doing some changes to accommodate the new logo, but I could not have done as good a job as he has. I hope he plans to keep me as editor.

This has been a very pleasant autumn and I hope the winter is not too bad. Enjoy the weather. I hope to see you at our meetings.

Armando Corripio, editor

AICHE Baton Rouge Fall 2014 Seminar

Overview of Nuclear Power, Monitoring Control Valve Diagnostics, Electric Motor Protection, Biofuels from Waste Water Treatment

Friday, 7th November 2014
8:00AM – 4:00PM

Location: Holiday Inn South
9940 Airline Hwy Baton Rouge, Louisiana 70816, (225) 924-7021

Earn 7 PDH's! Enrollment is Limited! Sign-Up Early!

REGISTRATION FORM

NEW! Register online at www.aiche-br.org, or mail this completed form with payment to the address below.

NAME: _____

MAILING ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

COMPANY: _____

EMAIL: _____ **PHONE:** _____

TECHNICAL/PROFESSIONAL SOCIETY MEMBERSHIP*: _____ (must indicate)

COST: ☐ \$75/person for Tech/Prof Society Members* prior to Nov. 5th
(Please check appropriate box) ☐ \$95/person for non-Tech/Prof Society Members prior to Nov. 5th
☐ \$110/person for all after 05 Nov 14

MAIL COMPLETED REGISTRATION FORM TO:

(Please include check if that is your payment option)
Must be RECEIVED by November 5th, 2014.
(Walk-ins welcome space permitting.
Check or cash only, no credit cards on event day.)

Oscar Alfaro (Treasurer)
1124 W Lakeview Dr.
Baton Rouge, LA 70810
Email: Oscar.Alfaro@Jacobs.com
Phone: (818) 642-8003

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

Refund Policy: Advance registration is 100% refundable with notice at least 14 days prior to the date of the seminar. Notice received between 24 Oct 14 and 6 Nov 2014 is 50% refundable. No refunds on day of the seminar.

Cancellation: 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 7th November 2014 Seminar

Tentative Schedule

7:00 AM – 8:00 AM: REGISTRATION & BREAKFAST

8:00 AM – 10:00 AM: MORNING SESSION

Nuclear Energy

Alisha Frederickson (Entergy)

- Overview of Nuclear Power
- River Bend Station Basics
- Fukushima Daiichi accident
- U.S. Nuclear Response to Fukushima
- Industry Outlook
- Question and Answers

About the presenter:

Alisha Frederickson is the Emergency Diesel Generator Engineer at River Bend Nuclear Power Station (RBS). She has been at RBS for almost ten years with six years as a Senior Nuclear Equipment Operator after serving in the United States Navy. She has a Bachelor in Marine Engineering from Texas A&M University; she also recently completed a Master of Business Association from the University of Phoenix. Her training and experience assists her in assuring that the Emergency Diesel Generators at River Bend start and perform all emergency functions if they are ever called upon to respond to an emergency.

10:00 AM – 12:00 PM: MORNING SESSION

Implementing valve performance diagnostics in new and old processing plant

Sandro Esposito (Setpoint Integrated Solutions)

- Asset management software myths
- KPIs for online performance analysis of a control valve
- Integrating digital valve positioner data to diagnose control valves
- Improved control valve reliability through continuous self-monitoring
- Case studies
- Questions / Answers

The process control industry can no longer rely on preventative maintenance programs to insure trouble-free operations in between shutdowns, or to lengthen the duration between them. Increased focus on safety and reliability is forcing plant managers to develop and implement new coping strategies and systems. In recent years, the intelligent valve interface has emerged as a key enabling technology — one that helps process plant owner-operators to maintain both reliability and profitability in the face of all of these challenges. With the help of digital protocols such as, HART and Foundation Fieldbus, the transfer of valuable information in a monitoring system for continuous control valve analysis enables predictive maintenance programs. A control valve is the most susceptible equipment to fail which can lead to unsafe or

unreliable operations. Therefore, the digital valve positioner is the bridging gap in ensuring reliable operation since it is capable of diagnosing abnormal situations as well as ensuring sustained valve performance, by informing the operation before it is too late. The constant economical pressure and stringent quality programs is forcing most industries to seek avenues to create the “Smart Plant” which will provide higher efficiency of the plant’s assets. The diagnostic data provided with digital valve positioners is the stepping stone to substantial cost saving benefits in control valve maintenance and for higher process yields.

About the presenter:

Sandro Esposito studied in electro-mechanical engineering & instrumentation and controls. He graduated from the Ahuntsic college in Montreal, Canada with a honorary mention from Hewlett Packard for the best academics throughout college. Over the years, he has also completed several courses in various new technologies and business such as marketing, pricing, finance metrics and management from Emerson, Masoneilan, GE and professional university institutes. He started his career 20 years ago with Fisher Controls. In 2001 he was recruited by Masoneilan as sales leader for digital products before being promoted to global marketing manager in 2004 leading Masoneilan's digital products and software while growing the competitiveness and broadening the product portfolio with new products such as SVI II AP, SVI II ESD, SVi1000, VECTOR, DTM software, ValscopePRO and ValVueOVD. He managed global alliances for system integration with partners like Yokogawa, Honeywell and ABB. For 9 years, he commercialized globally all digital products and software solutions, working closely with sales channels and customers at their corporate locations and plant sites, such as Shell, ExxonMobil, Valero, Lyondell, Petrobras, BP, Petronas, and Total. He has published 15 papers in leading industry journals and conventions all around the world and has 6 patents related to valve positioners and valve diagnostics. Sandro has been a key contributor and a member of the HART Foundation, FF Foundations, FDT-DTM organization and ISA. This industry presence and accomplishments make of Sandro Esposito a respected and credible subject matter expert in the industry. Sandro is the now the vice president of the automation division at Setpoint Integrated Solutions, a leading supplier of process control automation in the gulf coast.

12:00 PM – 1:00 PM: LUNCH

1:00 PM – 3:00 PM: AFTERNOON SESSION – Part 1

Electric Motor Protection

Matt Proctor (GE Multilin)

- Fundamentals of induction motor operation and common failures
- Motor ratings and what they mean
- Thermal overload protection using microprocessor-based thermal model
- Applying protective relays for smart asset management
- Questions / Answers

About the presenter:

Matt Proctor is currently a Technical Application Engineer at GE Digital Energy (Multilin) and has been with GE for over four years. Matt began working in the electrical discipline in 1997 as a co-op student at Mississippi Power Company in Biloxi, MS. Matt earned Bachelor of Science in electrical engineering from Louisiana State University in Baton Rouge, LA in 2001 and an MBA from LSU in 2005. He has experience with transmission substation protection and industrial electrical distribution design. His work experience prior to joining GE includes four years at Power & Control Systems in Baton Rouge and four years with Jacobs Engineering in Houston, TX. He specializes in power system studies and protection and control relay applications. Matt lives in Spring, TX with his wife and two children.

3:00 PM – 4:00 PM: AFTERNOON SESSION

Integrating Biofuel Production to Waste Water Treatment

Rafael Hernandez (ULL)

The presentation will describe alternative configurations associated with specific wastewater treatment scenarios that could contribute to generation of sustainable feed stocks to produce fuels and chemicals, and thus, petroleum displacement and energy security. The proposed configurations also integrate the use of other sources of waste, such as municipal solid waste, agricultural residues, and high strength industrial waters to enhance feedstock production rates. For example, results will be presented on the transformation of solid waste and liquid organic fractions into biogas, organic acids, and lipids for biodiesel production.

About the presenter:

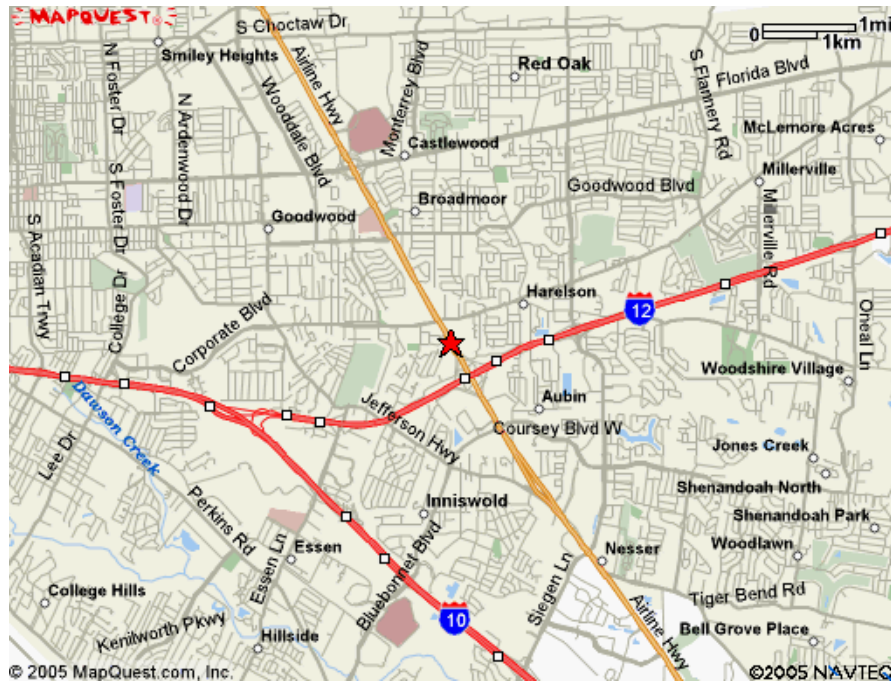
Rafael Hernandez has a BS (1993) and MS (1995) in chemical engineering from the University of Puerto Rico, Mayaguez, and a PhD (2002) in chemical engineering from Mississippi State University (MSU), Mississippi State, MS. He worked for the US Army Corp of Engineers Engineering Research and Development Center (1994-1997) on the development, design, and implementation of groundwater treatment technologies. His research activities are focused on the transformation of wastewater treatment facilities into centers of bio-crude for producing biodiesel and renewable diesel. He is interested in developing the scientific and engineering foundations to maximize the production of sustainable feedstock for producing biofuels. His research group has demonstrated that biodiesel can be produced from sewage sludge. He has managed over \$15 million dollars in research funding related to biofuels, prepared numerous technical presentations (>150) and peer reviewed publications (>50), and supervised graduate students and research staff. Presently he is Head and Professor of the Department of Chemical Engineering at the University of Louisiana (UL) at Lafayette. He holds the J. Madison Nelson/BORSF Professorship. He is also the Associate Director of the UL Energy Institute.

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 Holiday Inn South (9940 Airline Hwy, Baton Rouge, LA 70816)



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 (AWMA)