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Editor’s Message:

Hello there and welcome to the summer edition of the ISA AD newsletter from your friendly editor. So, where did we leave off from the last time we spoke? Well, the markets are still volatile, the world of oil and gas analysis is still on rocky ground this year, and unconventional hydrocarbon plays still dominate the industry conversations in North America. All these things are true. As indeed is the continued growth and strengthening of the ISA Analysis Division, as proven yet again by a wildly successful conference in Galveston, TX this past April. This edition of the newsletter provides a full recap of the proceedings, events and outcomes from the various meetings held during the week and offers a look to the coming events ahead for next year.

But before you dive, let’s pause and reflect for a moment on one of the key drivers to our industry; legislation. Whether you are on the manufacturer’s side of the fence or an industry producer, you will be acutely aware of legislation and how it drives and shapes the world of analysis. Much of it takes place as a sort of natural evolution, as say the EPA Sub Part Ja legislation that is being adopted this year for Sulphur / Hydrogen Sulphide emission. The industry has been aware for some time now that emissions rules would tighten and both industry producers and analyzer manufacturers have been able to adjust and provide solutions. This is the normal way of our business.

Then every now and again events occur that catch the industry off guard and we are left in a sort of legislative limbo, a vacuum if you will, until the governing bodies can meet to decide the future course of action.

Such is the case with the transportation of the various (and still somewhat new) unconventional hydrocarbon plays throughout North America. This is not just an argument of pipelines versus rail transport as it speaks more to the new ways we find the hydrocarbons, where they reside and where they need to be transported. Political processes aside in getting new pipelines built, the speed and the nature (in some cases short term) of new hydrocarbon plays has meant that a vast amount is now being transported via the rail system.

Consider this, in 2008 approximately 9,500 rail cars were used to transport...
hydrocarbons in the U.S. but by 2014 that number had risen to 400,000. Without pipeline infrastructure in areas like North Dakota where large fields such as Bakken are, the industry has turned quickly to the rail system for transportation. In many case these rail cars were not designed to handle the sort of light hydrocarbon mixtures being produced from these fields and the rail industry is not used to carrying such large quantities of hydrocarbons, often as much as three million gallons at a time.

This unprecedented rise in rail use has left a legislative vacuum on a number of levels that industry is now waiting on the governing body, in this case the Department of Transport, to review and issue guidelines and directives. From there, us as analysis folk can step in to help evaluate and control the process. That is after all our chief mandate for the industry. For more information on this issue there are some excellent articles online by Pulitzer prize winning journalist, Marcus Stern.

So without further ado, please dive into the fall edition of our newsletter. As always it is loaded with excellent messages, insightful information and a home for all things process analysis.

Stuart Simmonds
ISA Analysis Division Newsletter Editor

Message from the Incoming 2015-2016 Director:

I am honored and proud to be serving in 2015-2016 as the Director of ISA's Analysis Division which has contributed so much to and helped so many ploy their trades in the wonderful industry of process analytics. I was especially honored and proud to serve during our most recent 60th ISA AD event in Galveston, Texas. As the premier process analytical organization and one of the most successful divisions within ISA, it is amazing to see how far our AD organization has come in 60 years.

I joined ISA AD in 1995 and at that time, I knew next to nothing about process analytics. However, the continual encouragement and inspiration I as a then young engineer received from ISA AD coupled with an insatiable desire to learn helped me build the career I am blessed to have today. More importantly, I became able to complete the circle by giving back to this organization, its members and our process analytics fellowship and community. If you have not experienced this for yourself, then I highly recommend that you read on and of course, become a member of the ISA AD organization!

ISA AD is built on a solid bedrock of technical and cultural diversity. During the most recent 60th IAS AD event in April, we had over 70 suppliers representing their product technologies and had participants from 13 countries including presenters in our 12 sessions of 31 peer reviewed papers over 3 days. The event kicked off with classes in the fundamentals of process analysis and an advanced class in the use of statistics in analytical quality assurance and ended with hands on product training provided by several product suppliers. A special session on cybersecurity and what it means to our industry was also conducted on the last day that generated a lot of necessary discussion and learning on this critical subject matter. The bottom line is that this session and the 59 that preceded it not only provided a rich learning environment but also an excellent opportunity to contribute to and advance our organization and the process analytics industry.

Having been with and contributed to ISAAD for almost 20 years now, I always hear the comment, what a great event … it just seems to run itself. While it indeed seems that way, the reality is that ISA AD works as well as it does and provides the value it does because of a very dedicated and passionate group of folks that donate their time to this great organization and they keep coming back for more. Speaking of such folks, after years of dedicated service, Bac Vu, Manny Alvarez and Gary Brewer recently stepped down as the SP76 chair, Education chair and FACCS liaision, respectively. Thank you for your service gentleman! Whether you attend to learn or attempt to learn and participate, you are a part of this special organization! Of course, we are always looking for those that want to give back on any level as it’s a wonderful feeling to mentor our colleagues, advance the success of our great organization and help make our industry a safer, smarter and more productive environment in which all can personally and professionally thrive. At ISA AD, this is what we do and stand for.

So, how far have we come in 60 years? Come see for yourself! The 61st ISA AD will be back in Galveston, Texas from April 24-28 at the Galveston Convention Center. We look forward to seeing new faces and of course, our old friends that continue to help make ISA AD great. I want to personally thank outgoing Director, Don Nettles, and his predecessor, Randy Hauer, for placing their trust in me to lead ISA AD forward and we will be in great leadership hands when we turn over the reins to our Director-Elect, Paul Barnard, in 2017. I wish everyone a very safe and happy summer.

Tracy Dye
Director ISA Analysis Division (2015-2016)

Interview with Bob Farmer:

As we announced in our previous newsletter, Bob Farmer from Siemens (Applied Automation, Inc ) retired after forty years in the process analytical world. As a youngster just cracking out of my shell working in Asia I had the good fortune to visit Bartlesville on a number of occasions meeting and working with Bob and his team. As he has done with many others I was welcomed into the analyzer family, mentored and guided and always made to feel that this is an industry worth betting a career on.

So, it is particularly pleasing for me all these years later to have an opportunity through ISA AD to offer up a heartfelt thank you to Bob and to give the readership a brief window into his career and to ask to him for his final thoughts on the industry and he takes his well-earned break.

Brief synopsis of career:

Bob graduated BS Electrical Engineering from Kansas State University 1974. Upon graduation, went to work for Applied Automation, Inc., then a wholly-owned subsidiary of the Phillips Petroleum Co. in Bartlesville, OK. He started with AAI in the R&D group developing electronics for computer-controlled instrumentation. Over the following years, moved from R&D into project engineering, project management and marketing and was closely involved with five different generations of chromatograph systems. During that time, AAI changed ownership. After 40 years Bob ended his career as the Product Manager for Chromatography with Siemens.
Q1) What do you see 10 years in the future for on-line process analytics, any big game changers or still diverse vendors and relatively slow moving changes?
It is easy to be very wrong when looking to the future but I am convinced that on-line process analytics will continue to be an important business. Clearly, real time process control is crucial to management of product specifications, quality and cost and continuous on-line composition analysis will remain vital to enabling control. However, changes will be relatively slow in coming. Because of safety, reliability and cost concerns, our industry is very conservative and slow to change. However, the industry needs reduced physical size, installation and operating cost, improved technical performance and reliability and tolerance for difficult process and sample conditions. These things will happen over time; it is difficult to see “big game changers” occurring abruptly.

Q2) What have been the most significant changes to the analyzer industry during your career?
I have seen the most visible change in electronics and computer technology. Of course there have been many non-trivial advances in measurement technique, but the introduction of micro-electronic controls, extensive user interface and real time software capabilities and the advancement of integrated communication systems has been significant. Also, changes in manufacturing methods, such as computer-controlled milling and machining, silicon micro-machining and engineered plastics, now permit relatively low-cost production of critical mechanical parts, housings and optics that are used in analysis systems.

Q3) How did you get into the Process Analysis world?
The simple answer to this is, “I was offered a job”! At the time of my graduation, most major American oil companies were actively seeking new people. My best job offer then introduced me to this industry and my response was simply practical!

Q4) In your opinion what is the number one skill set to come into the profession? And part two, what is the most useful / difficult skill “outside” set you had to acquire as your career in analyzers progressed?
The best “single skill set” is to have several skill sets. Process analytics requires knowledge in several different disciplines including electronics, computer science, chemistry, mechanics and thermodynamics. You really cannot succeed as a specialist in just one. Likewise, the most important “outside” skill is the ability to listen and communicate with others. Nothing significant in my career can be attributed to only one person. It always requires a team.

Q5) Any tips on how to raise awareness of our profession and draw in the next generation of analyzer professionals?
In our profession, like many others, the people we think of as key contributors are often older. We expect that a high percentage of our workers will be retiring in the next 5 years. However, this may also be to our advantage in finding new persons to join us. The opportunities to contribute and grow in your career will be very high – and not too far away!

Q6) And finally - do you have any “the parties shall remain nameless”, anecdotes you would care to share about your time in process analysis?
A person acquires many fun experiences over time! I have had a wonderful opportunity to get to know many different kinds of people from all over the world and to have a variety of new experiences. In our business, differing approaches or ideas or philosophies about products and problems is a good thing and if you are lucky your competitors become your respected friends. The annual ISA Analysis Division Symposium is a great venue for meeting and listening to other people and for having memorable experiences. Rather than trying to describe any of these, I will end by encouraging readers to join in and gather your own enjoyable memories!

Speaking to Stuart Simmonds and Randy Hauer

Pictures from AD 2015:

Bac Vu, outgoing Standards & Practice Chair

At the April 26 SP76 meeting at AD 2015 Bac Vu announced he would be stepping down as chair of the Standards & Practices committee. Bac has given very generously of his time over the six years as chair person and carries the additional heavy load in his role as Analyzer Team Leader, Chevron Engineering Technology Company (ETC). During his tenure Bac worked on several initiatives including NESSI modular sample systems standards and several years on a revised draft of “ISA-RP76.0.01-1998 - Analyzer System Inspection and Acceptance” for IEC which is still in progress. As he steps down from his chair position Bac said he wishes to acknowledge the work Jim Tatera has put into the IEC Working Group on behalf of SP76. The SP76 committee chair is currently vacant, the Executive is openly canvassing for a replacement. If you wish to contribute to your profession at a high level please contact Tracy Dye. The committee chair organizes participation with ISA-SP76 for composition analyzers in collaboration with IEC SC65D (Analyzing Equipment in Industrial Process Measurement and Control) standards development committees. It is an important role in our Division and one that needs to be filled at the earliest opportunity

Cindy Cauthen, AD 2015 General Chair with Paul Barnard, 2017-2018 Director Elect

Tracy Dye, AD Director (2015-2016)

Heavy traffic at the buffet line. Food sponsored by the vendors in the Technology Forum.
Message from the Symposium Chair:

ISA’s 60th Analysis Division Symposium draws more than 300 attendees to explore the latest technical findings, share best practices and gain training.

I am very excited to report another record year! April 2015 more than 300 process and analytical professionals, industry experts, and 70 vendors participated in the technology Forum and Exhibition in Galveston, Texas to explore and discuss the latest advances in analytical processes, techniques and applications at the ISA Analysis Division Symposium.

I want to thank the many hours our team of volunteers put into this long-running symposium, now in its 60th year. We have heard so many positive comments regarding the symposium and the benefits we truly believe that this is a one of a kind event that promises education/industry understanding, new and innovative ideas, and networking/socializing amongst analyzer professionals with all types of backgrounds.

I look forward to seeing everyone, once again in Galveston, Texas for our 61st annual ISA AD Symposium April 24-28, 2016.

Stay tuned for more information.

Cindy Cauthen
cpcauthen@yahoo.com

Gilmer, Thomasson, Fowler, Konrad (GTFK) Award for AD 2015:

Each year at close of the AD Symposium, the award is made for the top three papers from the Symposium. The GTFK award is named after four distinguished and significant contributors to the technical content of the Analysis Division. We must never lose site of the fact that without the papers there would be no symposium. For that purpose I would like to give thanks to all of the authors and especially those who presented for their first time. I would also like to thank the peer review committee of six very experienced analyzer professionals; Dr. Jerry Clemons, Dr. Sam Langridge, Dr. Jerry Combs, the Honourable Rod Spitler, Steve Smith and Roy Muston.

The written papers are first graded in advance of the symposium by the review committee for; technical merit, originality, completeness, applicability, clarity and illustrations accounting for 70% of the overall score. During the symposium the audience is asked to participate in the scoring based on; presentation, technical merit and impact accounting for remaining 30% of the overall score. This year the scoring was particularly close and the audience score closely matched that of the committee. After the final tally only 5 points separated the top 12 papers and only 0.71 points separated of the top three winners which were;

First Place – Maintaining TDL Measurement Accuracy in High Temperature Applications
Jean-Nic Adami / Mettler-Toledo AG

Second Place – Validation of Process Gas Composition Desensitization for TDLAS Analyzers
Ani Weling & Julia Graber / GE Measurement & Control

Third Place – Re-Engineering Calibration in Optical Spectroscopy
Michael Roberto, Randy Pell, Scott Ramos & Brian Rohrback / Infometrix Inc.

In closing I will add as I do every year; the AD community can consider the call for papers now open. It is not too early to consider a position for AD-2016.

Paul Barnard
Outgoing Program Chair,
ISA Analytical Division Director Elect (2017-2018)
AD-2016 Galveston / Headline News:

Cindy Cauthen is our returning Symposium Chair and is in the process of forming her team. Details of the 61st annual AD Symposium will be posted on the website commencing Nov 24 with the following information as it becomes available;

Call for Papers:
See the website for details (www.adsymposium.org). Abstracts will be accepted in the order they are received and a waiting list will form when the program is filled.

Hotel(s)
The conference hotel is the Hilton Galveston Island Resort, right next door to the convention center. Book early if you expect to have space here. As in 2014 we will have overflow space at adjacent properties.

Technical Program
Rod Spitler and Mike Chaney will have the preliminary program on the website in February. There will be the usual three full days of peer reviewed papers.

Educational Programs:
The Fundamentals courses will be held on Sunday as well as the Advanced course(s). The schedule will be posted to the website by end of March.
The Hands-On courses will be held on the Thursday, details will be posted to the website by end of March.

Vendor Technical Forum:
Shana Kiser of Teledyne is our Vendor Chair.
We expect 70+ vendors, registration information will be available on the website in January.

Banquet and Keynote Speaker:
The banquet will be held on Tuesday night.
The Banquet sold out early last year, be sure to sign up for your tickets when you register.

Spouses Program
There will be a full spouses program; details will be available on the website.
A Special Thank You to Johnny Austin who kindly formats the Newsletter for us.

Our Supporting Sponsors

The AD invites vendors who participate in the technical forum at the AD to support the newsletter. We know there is keen competition for their promotion budget. They have chosen to contribute to the Newsletter and underwrite the special projects we fund with the proceeds. In addition, each year at AD a standing committee makes an award for the “Innovative Product of the Year” and this years recipient is AMETEK Process Instruments. They carry title to the award for one full year and receive a full page space in the Newsletter which you see following.

We thank all of our supporting sponsors for their generosity and innovation. If your company is interested in a placement please contact the newsletter editor
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