

# AIChE Newsletter Delaware Valley Section



Volume 51 Issue 1 October 2003

# AIChE DVS October 21, 2003 Meeting Process Control and Manufacturing – The S88 Batch (and Other) Control Standard

By Lynn Craig President of Manufacturing Automation Associates, Inc.

n October 21, 2003, AIChE-DVS and the Instrumentation, Systems & Automation Society (NJ Section)" (ISA) will conduct a joint meeting at which Lynn Craig (President, Manufacturing Automation Associates, Inc.) will present an overview of the S88 Batch Control Standard.

What on earth is an SP88 or an S88, you ask? Approximately 15 years ago, the ISA SP88 Committee took on the task of writing a S88 Standard to define Batch Control as a way to standardize various aspects of batch control in a way that allowed the various aspects to fit together. Through experience, fortunate timing and, yes, spectacular luck, the standard has been an overwhelming success. For the past 10 years, the S88 Standard has served as the basis for almost all of the newer batch oriented control systems on the market. As a result, a new approach to batch control has emerged, has been accepted broadly and has had a real impact on the batch control market, which now equated to about \$4.5 billion a year.

What did the S88 standard add to our knowledge of control? In part, it defined a hierarchy of modular control that lends itself to reusable control components. It also promoted flexibility by allowing a recipe to determine the product related characteristics of a process while equipment control functions are imbedded in the reusable modules. Further, it defined and gave names to the modules we have always had in *basic control*. Additionally, it defined a layer of *procedural control* that allows sequences of control actions to step a process through a recipe-

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Join the nationally recognized DVS this year for more interesting meetings, tours, and lectures.

#### **Location:**

Elephant & Castle Restaurant, Route 70 & I-295, Cherry Hill, NJ.

Theme: Engineer Night

#### **Program:**

6:00 P.M.- 8:45 P.M.; Social Hour 6:00-6:45 P.M., Dinner 6:45-7:45 P.M., Presentation . 7:45-8:45 P.M., Conclusion

#### **Ticket Price:**

Dinner \$20, plus cash bar.

#### **RSVP:**

PLEASE CONFIRM YOUR ATTENDANCE NO LATER THAN 3 P. M. FRIDAY, OCTOBER 17, 2003.

Call Ernie James, Phone: 856-456-5964, E-mail: ejames@smithservice.com to make your reservation.

#### Chair's Chat By William C. Youngblood, Esq.

t is with great pleasure that I welcome all of you back to what is shaping up to be another exciting calendar of events for the Delaware Valley Section of AIChE. As you will read, our first meeting this year, to be held on October 21st, will not be on the Delaware River as it was last year for our memorable Battleship New Jersey event, but instead will be over the river in Cherry Hill, NJ. Please plan on joining DVS-AIChE and ISA for highly regarded Lynn Craig's presentation on Batch Process Control and the S88 Standard. Also, be sure to visit our website (www.AIChE-Philadelphia.org) for a listing of future events including: the continuation of our CEO Lecture Series; a business card exchange at a local brew pub; a Student Night in addition to our Student Awards Banquet; and at least one plant tour, all of which are in various stages of planning.

Shifting gears a bit, I want to direct your attention to several articles in this edition of our newsletter because they speak to the state of AIChE which, as you will notice, is alive and well. First, please be sure to read AIChE President Dianne Dorland's Path Forward article which speaks to the present condition of AIChE. As President Dorland makes clear, AIChE has streamlined costs and is moving in the right direction. A significant sign that AIChE is not only afloat but beginning to sail smoothly again is the 2003 AIChE Annual Meeting, to be held October 16-21, 2003, in San Francisco. The Annual Meeting appears to be on course to hit record numbers in attendance, presentations and technical papers. Also, for you Young

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#### **AIChE Nationals News**

## AIChE National's Path Forward By Dianne Dorland, PhD, PE - President, AICHE

#### **Elections**

As many of you know, AIChE is facing a challenging time in its long and successful history. All members of AIChE can help shape the future of the Institute by casting a vote for the Institute's leadership. The 2004 National AIChE Board of Directors Election ballots election is underway. were mailed to all members at the end of August and must be received at AIChE by October 3, 2003. Alternatively, AIChE is offering electronic proxy (http:// www. cssconsult.com/elections/aiche2004) whereby you can authorize President Dorland and Secretary Chen to vote on your behalf for the indicated candidates. Please make it a point to vote today!

Also, AIChE President Dianne Dorland is putting together a Nominating Committee that will Select candidates for the 2005 elections. If you are interested in serving on the committee, or in recommending names for the committee's consideration, contact Dr. Dorland at president@aiche. org. The Nominating Committee will review all nominated candidates in November to develop the slate that will take office in 2005.

#### **Meeting Discount**

If you are planning to attend the Annual Meeting in San Francisco this November, the time to register is now. There's a special discount, And above the standard savings for preregistration, to all who sign up before October 10. The event at the San Francisco Hilton. which from November 16 to 21, will include a record-breaking 18 topical conferences, 550 oral sessions, and 4,000 papers, presented by renowned professionals from academia and industry, along with 500 to 1,000 poster papers. Make your plans now to join more than 4,000 of your colleagues by registering at http://www.aiche.org/ annual/registration.htm. The money you save by registering now could probably buy you a tasty dinner in the City by the Bay!

Dear Colleague,

I have good news to report about AIChE's future. This has been a very busy summer for the Institute's leadership, but, based on your suggestions, we're implementing a plan that assures the Institute's financial stability.

As you may know, hundreds of members have recommended that AIChE reduce its costs and move out of New York City. I'm happy to report that we are very close to signing an agreement to sublet 75 percent of our Manhattan space. We'll continue to look for opportunities to further reduce or eliminate the remainder of our space at 3 Park Avenue and search widely, including areas outside New York City, for the most cost-effective facilities for our much, much smaller staff.

The sublease comes at a cost, however. Given the current market for office space in Manhattan, AIChE has to provide some incentives and build-out allowances. We're working with our industry partners to fund this investment through gifts and interest-free loans. We've already raised nearly \$1 million from leading companies and generous members toward a goal of \$2.2 million. Of course, we really need additional support from members like you.

By the end of the year, we will have a staff of 40, compared to the current 78 and more than 100 just 18 months ago. Although these changes are difficult, AIChE will continue to provide you with the products and services you've told us are essential.

Discussions continue between the Boards of AIChE and the American Chemical Society, as well as other organizations. We continue to explore mergers, joint ventures, and other partnerships that could better position AIChE to serve chemical engineers as our profession, technology, and our industries evolve. A number of issues still must be resolved before the Board makes any such recommendation. We expect to reach some conclusions this fall. Naturally, current AIChE members will have a voice in our path forward.

I'd be remiss if I didn't report some very good news related to the 2003 AIChE Annual Meeting-a major factor in our financial well-being. It is shaping up to be our biggest and best ever. Early trends in registration and the number of papers accepted for presentation are among the indicators that point to its success. We hope to see you in San Francisco from November 16th to the 21st.

I will continue to keep you posted on our efforts to protect and preserve our Institute in these extraordinary times. I encourage you to visit http://www.aiche.org/changes for detailed and up-to-date information-not just on our finances, but also on our new staff structure and other developments. You may also email your thoughts, concerns, and suggestions to me at changes@aiche.org. Finally, I thank you for your continued support of AIChE.

Sincerely,

Dianne Dorland, PhD, PE President

P.S. You can best demonstrate your support for AIChE and our profession by renewing your membership. If you haven't paid your 2004 dues, please do so today.

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#### PlantSuccess Conference - October 15th & 16th

PlantSuccess will celebrate its 5<sup>th</sup> anniversary conference in the Philadelphia area with PlantSuccess Northeast 2003, on October 15-16, 2003, at the PHL Airport Marriott. The theme of the conference is "Best Practices Driving Plant Performance." Inaugural keynote, Jim Porter, DuPont's Chief Engineer and VP of Engineering and Operations, is returning as keynote with the presentation "Six Sigma and Best Manufacturing Practices: Delivering Powerhouse Performance."

PlantSuccess is a unique engineering conference with its focus on the successful implementation of engineering IT to improve the operating performance of complex and congested process manufacturing plants. In a short period of time, PlantSuccess has built an enviable reputation for outstanding content with actively moderated sessions and innovative managers with industry leaders addressing business drivers, impact on work processes and integration requirements.

Jim Porter will set the conference table for another outstanding roster of speakers, including: Karan Sorensen, VP, Johnson & Johnson; Bob Fraga, manager of supply management, US Postal Service; and Sue Jones, manager of engineering and design systems, Merck. This year's conference also features several panel discussions, including:

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- It's All About Managing Change with DuPont's John Sieg and Larry Killingsworth of Air Products, consultant Steve Thomas as moderator.
- Supply Chain Execution with BPSolvay's Brad Snyder and Tom Argue of Rohm and Haas, with consultant Jim Brown as moderator.
- ISA95: Integrating Enterprise and Manufacturing Systems with Eric Cosman of Dow Chemical, Ray Walker of DuPont, Don Clark of AspenTech and John Wason of ARC Advisory Group as moderator.
- Process Equipment Reliability Database with Hal Thomas of Air Products with Dave Belonger, a consultant with the Center for Chemical Process Safety (CCPS) as moderator.
- Solutions for Process Industry Owner-Operators, featuring a representative from our major sponsors: Aveva, Ivara, Skire and The Shaw Group.

A comprehensive agenda with presentation titles, abstracts and speaker bios plus online conference registration will be available at www.PlantSuccess.com by the end of this week. Visit the website to learn more about this unique conference, to review the agenda from previous conference and to download presentations of interest. Also, if you have any questions or need additional information, call Carl Howk at 770-565-3282. Members of the AIChE's Delaware Valley Section can take an additional \$100.00 off the conference fee of \$795 and the "early-bird" discount also applies.

#### Young Professionals Advisory Board Update - by Brenda Lando

he Young Professionals Advisory Board (YPAB) was instituted in June 2002, and since then has made significant progress in moving toward its goal of gaining and maintaining young professionals' involvement in AIChE. YPAB's success has come from our enthusiastic volunteer leadership at the National Conferences over the past year. YPAB had the opportunity to promote the up-and-coming trend of implementing Young Members Groups at the Local Section level at both the 2003 Spring National Meeting in New Orleans and at the 2003 Leadership Development Conference in North Jersey. Due to the positive reception from the groups at both of these conferences, YPAB has been asked to lead a Prototype Young Professionals Conference jointly with the National Student Conference at the 2003 Fall National Meeting in San Francisco.

I was able to represent both the Delaware Valley Local Section and YPAB at the 2003 Spring National Meeting in New Orleans, held March 28 - 30. I shared YPAB's progress and ideas for the future with the Career & Education Operating Council (CEOC) and the Board of Directors. The presentation included a review of YPAB's goals, members, and introduced our 4-sided approach to gaining and maintaining young professional membership in AIChE: Introduce Young Members Groups at the Local Section level; Create a Young Professionals branch of the AIChE National Website; Increase Corporate involvement by including AIChE promotional material in New Hire Packets; Develop a "What's in it for Me?" Marketing campaign geared toward young professionals. Overwhelming support and feedback from the Board of Directors was received, and the YPAB gained the approval it needed to move forward with these 4 initiatives.

This year's Leadership Development Conference took place June 6 - 8 in North Jersey, and brought together Local and National level leaders from across the country. This conference fell during a difficult time for AIChE National – a time where mergers, acquisitions, and downsizing are common topics of discussion. A large focus of the conference was updating the AIChE members on the current status of the organization, as well as the possibilities for the future. Many of the sessions revolved around incorporating changes and improvements at the National level. YPAB took this opportunity to lead a session called "Securing the Future: Young Professional Membership in AIChE". The session included a brief overview of YPAB and our goal of implementing Young Mem-

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## CHEMICAL CONSULTANTS NETWORK October 8, 2003, Meeting

Visit our web page at www.chemconsultants.org

<u>Date & Time</u>: Wednesday, October 8, 2003 at the Cynwyd Club, Bala Cynwyd, PA; Mixer, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

# Speaker Topic: Estate Tax Planning and the Use of Trusts Mr. Brian McGowan & Sons, CPA

<u>Abstract</u>: The McGowans will provide an EZ to understand and meaningful overview of estate taxes and how the various types of trusts are used with an emphasis on the needs of individuals who work as consultants since a number of their clients are professional consultants. Time will be provided at the end of the presentation for general questions from the attendees.

#### **Biography**:

#### Brian J. McGowan, MS, CPA

Mr. McGowan is a former member of the Large Case team of the Internal Revenue Service performing investigations of international companies. He was a member of the Office of the President of Sun Oil Co and the Chief Financial Office or a division of Sun Oil Co. He was responsible for all mergers and acquisitions for the firm. Mr. McGowan was an Associate Professor at Widener University's Graduate School, teaching investment and financial and estate planning. He is a member of both the American and Pennsylvania Institute of CPAs and a former member of the Ethics Committee of the PA Institute of CPAs. He holds a Masters Degree in Tax Law and is also a Registered Investment Advisor.

#### Brian J. McGowan, Jr., CPA

Mr. McGowan is a Dean's List graduate of the Sellinger School of Business of Loyola College. He majored in International Business. Mr. McGowan worked at Stinnes Oil Co, an international oil trading fir in Hamburg, Germany. He is a member of both the American and Pennsylvania Institutes of CPAs, a Registered Investment Advisor, and a partner in McGowan & Co, LLP and McGowan and Co, LLC. Mr. McGowan has been a speaker on investments, the role of the Investment Advisor, estate planning and acquisitions and mergers.

#### Brendan M. McGowan, CPA

Mr. McGowan is a cum laude graduate of Georgetown University of Loyola College. He majored in Finance. Mr. McGowan worked at Stinnes Oil Co, an international oil trading fir in Hamburg, Germany. He is a member of both the American and Pennsylvania Institutes of CPAs, a Registered Investment Advisor, and is a partner in McGowan & Co, LLP and McGowan and Co, LLC. Mr. McGowan has been a speaker on insurance, the role of the Investment Advisor, and the use of t rusts in estate planning and investments.

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#### **Professional Development**

by Mark DeLuca

elcome back from the summer vacation. Industry works through the summer, but AIChE, following an academic schedule, takes a break from its meetings during the summer. For the months with no meetings there is no newsletter. I was looking forward to the economy improving over the summer, so I could report on the hot new areas where chemical engineers are being hired. That improvement did not come.

There are still 18 AIChE members that are actively looking for work. Having this many people out of work is a fourteen year high. This economic indicator is not as scientific or robust as the GNP calculation or the other leading economic indicators, but this data is closer to home. It is data about people just like us. These people are chemical engineers who worked in our area doing what we do.

Even with 18 people out of work, the sky isn't quite falling. There are over a thousand AIChE members in the Central Jersey and Delaware valley sections who are working. Companies are investing billions of dollars locally in the areas of pharmaceuticals, energy, and environmental improvement.

The professional development column covers hiring trends, which can help readers, determine where to invest their time and effort to best stay on top of their careers. While I don't see the hiring yet, there is one area we should all be looking at, that is chemical security. There has been a lot of talk about the need to beef up our nation's infrastructure in response to terrorist threats. The August blackout in the Northeast is a reminder of just how vulnerable our nation is today. AIChE National offers a few programs covering security. While little hiring demand has materialized so far, I expect there will be a need for people with skills in this area. This career skill may be immune to the general trend of industry to move overseas because security is as much an issue overseas as it is here. Chemical security is likely to become as important as safety, when we design chemical processes.

#### **DVS October 21st Meeting**

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defined procedure. Moreover, it defined *coordination control* which keeps all the other pieces and parts properly sorted. Overall, the S88 Standard has provided an efficient means for collecting data in an understandable way from a process that, by its nature, is constantly changing state.

S88 was adopted as an ANSII standard about ten years ago and, more recently, became an international standard (IEC61512-01). Since the original standard was first published, two more parts have been issued, and approved, and a fourth part is now underway. However, the seminal work of the S88 Standard remains the original work or part of the standard and all of the implementationoriented work that has followed is based on the original work. One of the more interesting realizations that have evolved from the work is that S88 principles are just as applicable to continuous processes as they are to batch processes. Also, interestingly, that S88 principles are now being applied in the packaging industry.

This presentation is an overview of the S88 Batch Control Standard. It will cover the basic principles outlined in the standard and the way those principles can be used in any process manufacturing application. It will touch on

the benefits of a modular approach, the flexibility of a separate recipe, data collection in a batch environment, and the application of the standard to manual and partially manual processes.

#### Speaker Biography:

Lynn W. Craig, President, MAA, Inc.

Lynn W. Craig is the President of Manufacturing Automation Associates, Inc. a consulting firm specializing in manufacturing methods and technologies for the batch processing industries. He is past chairman of the World Batch Forum, an honoree of the Control Hall of Fame, Chairman of the ISA SP88 Batch Control Committee and also serves as convener of an international standards group addressing the same subject. His career spans more than 30 years in industry, primarily with Rohm and Haas Company where he held positions as project engineer, maintenance superintendent, production manager, an corporate manager of control and automation. A registered professional engineer, he has participated in the design, installation and operation of more than 50 process automation systems and is the author of many papers and articles on maintenance management, automation, batch control, automation management and related subjects.

#### **CNN Oct. Meeting**

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Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA. From City Line Ave. (Route # 1) drive north on Conshohocken State Road (Route # 23) about 3 long blocks. Continue north on Trevor Lane instead of following Route #23 left. At "Y" in road one block north on Trevor Lane turn left where clubhouse and parking are on the left side of the road. Please park in lot if space is available; otherwise park on Trevor Lane. If lost, call the club at 610-667-4524.

Reservation: To make or cancel a dinner reservation, e-mail CCNReservation@aol.com or call the ACS office at 215-382-1589 (leave message on voicemail if necessary). Fee, including food and beverages, is \$20 provided reservations are made before 6 PM Friday, Oct 3<sup>trd</sup>; \$25 if made subsequently by 10 AM Monday, Oct 6th. If no reservation is made by the final deadline, food and beverages will not be available unless a cancellation occurs. Noshows will be invoiced. No reservation is required for talk only; however, we ask that you please register so that we can notify you of any change in plans.

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#### **Young Professionals Advisory Board**

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bers Groups in several Local Sections. To facilitate this, the session was divided into break-out groups where key ideas were captured from members of all ages from across the country. Since the conference, I have received a handful of emails from Local Section Leaders with additional ideas and/or requests for assistance to implement a Young Members Group in their section!

Based on all of this positive feedback and increasing support from all levels of AIChE, the YPAB has outlined a weekend full of events for Young Professionals to be incorporated into the 2003 Fall National Meeting November 15 – 17 in San Francisco. The joint participation between Young Professionals and Students during the Student portion of the National Conference is meant to serve as a stepping stone for further progression toward a National Conference specific to Young Professionals. This fall, Young Professionals will begin by holding a session geared toward graduating students to better prepare them for their transition from college to the "Real World", whether this means continued education, a traditional ChemE career, or a non-traditional position such as the increasingly popular career path in Business. To facilitate this, YPAB is sending 5 young volunteers from a wide variety of backgrounds to give brief presentations on their experiences thus far, followed by break-out sessions for the benefit of the students to ask personalized questions. There will also be two social networking events during the 2003 National Conference to bring together Students and Young Professionals on an informal level to exchange ideas, promote the benefits of AIChE after graduation, and provide an opportunity for students to make contacts in the professional world.

I encourage all of you Young Professionals to begin to enjoy the benefits of the American Institute of Chemical Engineers, become more involved, and even participate in this year's 2003 Fall National Meeting in San Francisco! If you are interested in joining Delaware Valley Local Section's Young Members Group, or DVS in general, please contact Brenda Lando (brendalando@yahoo.com) or any other officer for more information. YPAB recognizes and appreciates all of the support we have received, and we look forward to continuing to give back to the organization in the future!

-Brenda Lando, '01 Bucknell University

### **Future DVS AIChE Meeting**

November	CEO Meeting
December	Brew Pub Business Card Exchange
January	Plant Tour TBA

#### Chair's Chat

(Continued from page 1)

(er) Professionals, please be sure to read Brenda Lando's outstanding article regarding the very active Young Professional Advisory Board of AIChE and their plans for an exciting weekend in San Francisco prior to the Annual Meeting. Hopefully, many of you are planning to attend the Annual Meeting and will take advantage of the discount mentioned in this newsletter. For those of you who cannot make the cross country trip, consider attending the PlantSuccess Conference on October 15-16, 2003, right here in Philadelphia.

Just as the national organization of AIChE is building momentum, so too is the Delaware Valley Section of AIChE. For those of you who have been active members of DVS-AIChE in the past - enjoy the ride! For those of you receiving and/or reading this newsletter for the first time - welcome! For those of you considering becoming involved in DVS-AIChE at some level - now is the time! The Delaware Valley Section has several interesting committee positions available which are very flexible to your interests and time. Please take the time to read and enjoy our newsletter, to visit our website, and to become involved by attending an upcoming meeting, joining a committee or even submitting an article for our newsletter. For more information on how to become involved, contact any one of DVS-AIChE Executive Officers. I look forward to seeing many of you again, and meeting some of you for the first time, at an upcoming meeting.

#### **Executive Officers 2003-2004**

Chair William Youngblood Phone (H) 610-525-1935 wyoungblood@comcast.net

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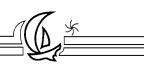
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