

## KEYNOTE SPEAKER AT 2009 AICHE NATIONAL MEETING FLUOR CORPORATION CEO ALAN BOECKMANN

The keynote speaker at the 2009 AICHE National Meeting will be **Alan Boeckmann**, who is Chairman and Chief Executive Officer of Fluor Corporation. The National Meeting is being held in Tampa, Florida on April 26-30, 2009, and approximately 3000 chemical engineers are expected to attend. Mr. Boeckmann is expected to address short and long term perspectives for energy supply, chemical processing and petroleum refining worldwide, including sustainability and the environmental impacts of meeting societal needs.

Mr. Boeckmann is an electrical engineering graduate of the University of Arizona, and he began his career as an engineer with Fluor Corporation in 1974. From 1992–1996, he held various management positions including assignments in California, Texas, South Carolina, South Africa, and Venezuela. From 1996–2001, he was president of Chemicals, Plastics and Fibers and group president of Chemicals and Industrial Processes for Fluor Daniel. From 2001–2002, he was president and chief operating officer of Fluor Corporation. In 2002 he was named Chairman of the Board and Chief Executive Officer.

Active in a variety of business and professional organizations, Boeckmann serves as a director on the boards of the American Petroleum Institute, Archer Daniels Midland Company, Burlington Northern Santa Fe, National Petroleum Council and Southern Methodist University's

Cox School of Business. He is a member of the Business Roundtable, the World Economic Forum and the University of Arizona's College of Engineering's Industry Advisory Council.

Mr. Boeckmann has been actively involved in the fight against corruption in the international engineering and construction industry. Fluor helped found, and continues to lead, the World Economic Forum's Partnership against Corruption Initiative (PACI). Led by Mr. Boeckmann, PACI is the only global, business-driven, multi-industry anti-corruption initiative. By joining PACI, businesses commit to adopting zero-tolerance policies toward bribery and corruption and maintaining programs that guide the behavior of employees, agents, suppliers, contractors, and joint-venture partners.

Fluor is one of the world's largest engineering, procurement, construction and maintenance companies operating a network of offices in 25 countries across six continents. Over 40,000 global employees serve clients in a variety of industries, including power, infrastructure, chemicals and petrochemicals as well as oil and gas. Fluor builds some of the world's most complex and challenging projects ranging from oil and gas platforms, pipelines and refineries, highways and bridges to coal, gas and nuclear power plants. Fluor is consistently rated as one of the world's safest contractors,

Fluor also provides operations and maintenance services for its projects, as well as administrative and support services to the US government.

Fluor is a leader in Sustainable Development which is defined by the United Nations World Commission on Environment and

## SUMMARY OF THE PHILADELPHIA MEETING

In the Annual Business Meeting, President **Dale Keairns** introduced **Henry (Hank) Kohlbrand**, the incoming AICHE president as of January 1, 2009.

Also introduced was **June Wispelwey** who will become AICHE's Executive Director as of January 1, 2009. Wispelwey will replace **John Sofranko** who has held that position for eight years. Sofranko's leadership in dramatically restructuring AICHE's operations and laying a solid foundation for future growth and expanded inclusiveness of membership was commended.

**June Wispelwey**, a chemical engineer who was associated with the launch of the Society for Biological Engineering (SBE), was formerly associated with Aventis Behring and Lyondell. She was executive director of SBE for the past four years.

The official paid attendance was 4,796 with about 1,600 undergraduates not included in that number and a large number of emeritus and comps so that overall attendance was near 6,000 people. We had 738 oral sessions and 35 poster sessions which included many special events like the Institute Lecture (**Mark Davis**) which drew close to 1,000 people and the newly initiated Industrial Innovation Award Lecture (3M and its CTO, **Fred Palensky**), which drew between 200 and 300 attendees midway through the next to last day (Thursday) which we thought was quite good.

The above statistics are all records (at least for the records we actually keep...the Institute Lecture by MIT's **Bob Langer** probably drew a few more). Anyway, it was by all accounts probably our best meeting ever. We haven't tallied the average session attendance yet or gathered the e-mailed survey responses.

## UPCOMING MEETINGS

**2009 Spring National Meeting**  
*Tampa Convention Center • Tampa Florida*  
*April 26-30, 2008*

**2009 Annual Meeting**  
*Gaylord Opryland Hotel • Nashville, Tennessee*  
*November 8-13, 2009*

**2010 Spring National Meeting**  
*Grand Hyatt • San Antonio, Texas*  
*March 21-25, 2010*

**2010 Annual Meeting**  
*Salt Lake City, Utah*  
*October 17-22, 2010*

Development, as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." The Dow Jones Sustainability Index defines sustainable development as a business approach that creates long-term shareholder value by embracing opportunities and managing risk deriving from economic, environmental and social developments.

*Ralph W. Pike, First Vice-Chair*

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## CHAIR'S CORNER

*It has definitely been an interesting year.*

As I look back at the two other Chair's Corner editorials, it is easy to see how opinion has shifted.

Last summer, I was filled with optimism about the importance and opportunities for chemical engineers. At that time, many companies were actively recruiting, oil and gas prices were at record highs, and the list of major projects requiring engineers seemed unlimited.

Now, many of those same companies are laying off engineers, oil is back below \$40 (as I write this), and several major projects have been cancelled or deferred.

So it would be reasonable to assume that my outlook may have shifted. But that assumption would be incorrect. My long term outlook has not shifted – I still strongly believe that chemical engineers will have a major role in solving society's problems, and that within a year we will be busy.

One problem that we have, which I do not know the answer to, is the inherent instability in some of the economic systems that we have created. Economic activity as a whole tends to follow a positive feedback loop. Positive economic activity increases demand for a particular product or service. Companies that can provide that product/service expand, and hire more people, or pay their people more. These people go buy other goods, causing increases in demand for other products. That causes companies that provide these products to hire/pay more, and their workers want more of the original product/service. And the cycle continues. Unfortunately, these positive feedbacks have the same impact in reverse, and that is what we are seeing now.

Another example of an unstable system is the historic run-up, and run-down, in the price of oil in 2008. In the U.S., the oil price is measured and reported in dollars. Suppose an event happens to cause the price to go up (low inventories, political unrest in a major producing region, hurricane in the Gulf, etc.). Since the U.S. imports a lot of oil, currency traders consider higher oil prices as "bad" for the U.S. economy, and that causes them to sell dollars, forcing the dollar down against other currencies. However, since oil is also traded in many other currencies, the lower dollar causes the price to look cheaper to people buying oil in other currencies, so they buy more oil, causing the price of oil to go up. This causes currency traders to bid down the dollar...and the cycle continues. At some point, people realize the price is too high, and the process reverses itself. While this is an opportunity for really savvy traders, it makes it much harder for companies to plan and manage their business.

If we could figure out how to shift these inherently unstable economic systems into more stable systems, it would be better for society in the long run.

The Fuels and Petrochemicals Executive Committee has been busy this year, planning things to make the division better. A few examples are:

- We decided to have regular conference calls of the Executive Committee, approximately every eight weeks, so that we can make regular progress on initiatives.
- We have created a new position, called Communications Director. Lori McDowell has graciously volunteered to fill the position. By the time this is published, the required changes in the by-laws should have been voted on in the membership. The Communications Director is responsible for the Flashpoint Newsletter, the division website, and other member communications. The newsletter will continue to be published three times per year. We are moving toward mostly electronic distribution (via e-mail/web link) of the newsletter, but we still plan to mail hard copies to all members that request hard copy distribution.
- We have concentrated on upgrading the division web page. Gabriel Garcia has volunteered to be our Webmaster, and is doing

## Notes from the Editor

Welcome to my first edition of Flashpoint as editor. In addition to Flashpoint editor, I will be taking on the newly created role of Fuels and Petrochemicals Communications Director, which will help link the webpage, newsletter and any other way we communicate with our members. One of the first changes you will see is to the newsletter. This will be our last hardcopy edition of Flashpoint! Starting with the summer issue, it will be sent out electronically and posted on the F&PD Website. If you would still like to receive a hardcopy, let me know by email at [communications@aiche-fpd.org](mailto:communications@aiche-fpd.org) or phone 281-872-2147. And make sure your email address is up to date with AIChE!

One thing I must do is thank **Bob Dye**, who has been editor of Flashpoint for the last few years. Bob has done a great job keeping us all informed, and we do appreciate it! While Bob has stepped down as editor, he will continue to contribute to Flashpoint. I would also like to thank **Cathie Holly**, who has been instrumental in getting this Newsletter together for many years!

You will also start to see many changes to our website, starting in March. We will be updating it weekly, and will have more features for our members and student members. We also have a new domain, [www.aiche-fpd.org](http://www.aiche-fpd.org) and a new Webmaster, **Gabriel Garcia**! Please be patient, as we make these changes, and check back frequently.

There is also a lot going on in the F&PD Community. While the economy is effecting everyone, it has not slowed down F&PD. The Division was active at the Philadelphia meeting, sponsoring a Centennial Session with invited speakers entitled "100 Years of Fuels and Petrochemicals". A reception sponsored by Praxair followed the session. A videotape of this event should be available shortly in the members only section of the webpage. F&PD will again be participating in the Spring Meeting in Tampa (see the Programming Update), and for those who cannot attend in person, AIChE is trying to organize live Webinars! F&PD has just announced our Award Winners, **Bipin Vora**, retired from UOP, the Tyco Service Award, and **Doug White**, Emerson, won the Division Award. And the Division will be awarding our first Annual Scholarship this April. Voting for new officers is in progress right now!

That's it for now, but I welcome any comments on the newsletter, webpage, or anything else. Send them to [communications@aiche-fpd.org](mailto:communications@aiche-fpd.org) or enter them in the Contact Us Section of the Webpage.

*Lori Mc Dowell*

a great job getting us set up. We have switched to a different host server, and have registered the domain: [aiche-fpd.org](http://aiche-fpd.org). By the time you read this, the new web page should be up and running. We plan to build the members area to include a lot of information that should be interesting and useful to chemical engineers.

- We have initiated a program to offer a one time scholarship to a high school senior interested in pursuing an engineering degree.
- There are plans to initiate a Mentorship program for interested Fuels and Petrochemicals Division Members.

The list of people to thank is long, and I am afraid that I will leave someone important out. Special thanks go to Rick Mallinson, Lori McDowell, Steve Coleman, Dennis O'Brien, Nina Scatton, and Dennis Griffith. They all contributed significantly to help me get things done for the division.

Finally, although my year as Chair of the division is coming to an end, I will still be involved. As Past Chair, I am responsible for the Awards and Nominations Committee. Seeing the effort that Rick Mallinson has put into those responsibilities this year, my efforts in supporting the division will not decrease very much next year. I hope to be able to provide as much support to our new Chair, Ralph Pike, as Rick provided to me this year.

*James Turner*



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## PROGRAMMING UPDATE

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### Uncertainty...

The best word to describe the current economic situation is “uncertainty”. Unfortunately, that means people are on the sidelines and waiting for any sign of certainty before getting back in the game. As chemical engineers, we should feel confident. Surprised by my statement? There are reasons why chemical engineers should feel confident about the future.

Despite the current turndown in demand for fuels, the world will need significant increases in energy from various sources. Not only will there be increased demand for energy, there will be tighter restrictions on the production and use of the energy related to efficiency and environment impact. Chemical engineers will be in the forefront of development, implementation, and utilization of more efficient and improved energy sources.

Since the chemical engineers will be part of the solution, they need to be informed about industry ideas, opportunities, and impact from regulations and public pressure. A great place to get this information is at the 2009 AIChE Spring Meeting, specifically the sessions hosted by the Fuels & Petrochemicals Division (FPD). The FPD will host three main tracks of sessions:

- Topical 7: 12<sup>th</sup> Topical on Refinery Processing (9 sessions and 2 tutorials)
  - Schedule online:  
<http://aiche.confex.com/aiche/s09/techprogram/D1351.HTM>
- Topical 6: 9<sup>th</sup> Topical Conference on Gas Utilization (6 sessions)
  - Schedule online:  
<http://aiche.confex.com/aiche/s09/techprogram/D1350.HTM>

- Group 16: Fuels and Petrochemicals Division (2 sessions)
  - Schedule online:  
<http://aiche.confex.com/aiche/s09/techprogram/D1338.HTM>

The tutorials will be on energy efficiency and CO<sub>2</sub> reduction; topics of concern for everyone. Complimentary to these tutorials will be a session on energy conservation. In addition, some sessions will review the latest findings in production of fuels from unconventional or underutilized sources such as biodiesel and renewable fuels and new technologies in refining. There will be sessions on automation and process control, and simulation solutions. Another discussion relates to the new interest in and enthusiasm for coal and biomass as potential future feedstocks.

Don't let uncertainty keep you out of the game. Stay informed and be active. I hope we see you in Tampa to learn more about fuels and petrochemicals ideas and solutions.

*Tim Olsen*

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## PROFESSIONAL ENGINEERS NEED PDH CREDITS?

Plan to take in the Gulf Coast Solids Handling and Processing Show in the Pasadena, TX Convention Center April 1-2, 2009.

There will be exhibitions and technical seminars (10 or 12) running two at a time and they are good for Professional Development Hours (PDH) credit.

A Texas style BBQ lunch is catered each day, and it's free.

Moreover, admission is free!

Register on-line via [www.gulfcoastsolids-show.com](http://www.gulfcoastsolids-show.com) giving name, company affiliation and address data.

This show is sponsored by the Houston Materials Handling Society, a chapter of the South Texas Section, ASME.

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F&PD member **Irv Wiehe's** new Book "Process Chemistry of Petroleum Macromolecules". is now available. This book describes how resid conversion can be greatly increased and how refinery fouling mitigation can be mitigated through new scientific insight. F&PD Members can receive a discount until June, 2009 if they order it through [www.crcpress.com](http://www.crcpress.com) Just insert the code, 229LC, on checkout, to receive free shipping plus a 25% discount.

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