



# 15 AIChE

## Spring Meeting, Austin, TX

Chemical engineering practitioners from industries worldwide joined with the global process safety community at AIChE's 2015 Spring Meeting and 11th Global Congress on Process Safety, April 26–30 in Austin, TX. Held at the Austin Hilton and Austin Convention Center, the meeting offered more than 200 technical sessions across eight topical conferences and special program tracks, and attracted more than 2,000 participants from 49 countries. Debuting this year, the Big Data Analytics Topical Conference explored issues related to the collection, analysis and use of vast amounts of new data available to the chemicals industries. The meeting continued its coverage of shale gas and tight oil, including process safety considerations, with the Executive Panel on Opportunity Crudes. At the Process Development Div. Plenary Session, experts presented theory, tools, and commercialization know-how related to new processes. Recently inaugurated programs devoted to Manufacturing in the 21st Century, Emerging Technologies in Clean Energy, and Upstream Engineering and Flow Assurance returned to the Spring Meeting, as did conferences on gas utilization and refinery processes, the Kister Distillation Symposium, and the annual Ethylene Producers' Conference. Receptions, luncheons, student workshops, and other special sessions rounded out the program.



Photo by Douglas Clark

▲ Some of AIChE's most engaged young members gathered at a mixer organized by the Institute's Young Professionals Committee.



Photo by Douglas Clark

▲ AIChE Foundation trustees Eduardo Glandt (left) and Syamal Poddar chat during a Welcome Reception held in the exhibition area.



◀ Marvin O. Schlanger, Chairman and Chief Executive Officer at CEVA Group, set the stage for the Spring Meeting and Global Congress on Process Safety with his opening keynote address entitled "Chemical Engineering: Is This the Golden Age?" Schlanger also received AIChE's Government and Industry Leaders (AGILE) Award, in recognition of his creativity and innovations as a leader of CEVA Group, LyondellBasell, ARCO Chemical, and other companies that employ chemical engineers.



## 11<sup>TH</sup> GLOBAL CONGRESS ON PROCESS SAFETY

Nearly 1,000 process safety professionals from hundreds of organizations worldwide gathered in Austin for the 11th Global Congress on Process Safety (GCPS). Organized by AIChE's Center for Chemical Process Safety (CCPS), Safety and Health Div., and Design Institute for Emergency Relief Systems (DIERS), the GCPS incorporated the programming of the 30th CCPS International Conference, the 49th Loss Prevention Symposium, and the 17th Process Plant Safety Symposium. In addition to launching a new DIERS Symposium, the Global Congress also offered the Process Safety Management Mentoring (PSM<sup>2</sup>) Forum for young professionals entering the field, and Process Safety Spotlight sessions featuring international process safety perspectives. This global emphasis was also evident in sessions conducted in Spanish, Portuguese, and Chinese, and at a session about process safety in Japan. The GCPS co-hosted some of the Spring Meeting's major events, including the opening keynote address.

▶ Shakeel Kadri, Executive Director of the Center for Chemical Process Safety, welcomed attendees at the Global Congress' opening plenary session. The 2015 GCPS coincided with the 30th anniversary of the establishment of CCPS, and included programming based on CCPS's Vision 20/20 objectives for global process safety excellence.



◀ Rainer Hoff (left), Chair of this year's GCPS, received the Institute's thanks from AIChE President Cheryl Teich at a gathering of AIChE leaders.



▲ Daily luncheons were among the meeting's highlights. Left: On Monday, Wesley Lohec, Vice President for Health, Environment, and Safety at Chevron, spoke at the GCPS luncheon about challenges in sustaining effective process safety. CCPS Executive Director Shakeel Kadri discussed process safety culture at Tuesday's GCPS luncheon. Right: Wednesday's luncheon, sponsored jointly by the Spring Meeting and the GCPS, featured Al Sacco, Dean of the Edward Whitacre Jr. College of Engineering at Texas Tech Univ. Sacco shared his unique perspectives on process safety, based on his experiences aboard the space shuttle Columbia.



▲ At the Executive Panel on Opportunity Crudes in a Changing Market, experts delved into the engineering, economics, and process safety factors involved in shale gas and tight oil extraction and handling. Panelists included (from left): Michael Webber, Deputy Director of the Energy Institution at the Univ. of Texas at Austin; Terry Higgins, Executive Director of Global Refining and Special Projects at Hart Energy; Steve Arendt, Vice President of ABS Consulting; and Carl Weaver, Senior Research Design and Development Engineer at Baker Hughes.



▲ One of the meeting's highlights was a panel discussion on big data analytics. Sharing their expertise in the technical challenges and business opportunities presented by the burgeoning availability of massive amounts of electronic data were (from left): Deborah Grubbe, President and Owner of Operations and Safety Solutions; Michael Firstenberg, Director of Industrial Security at Waterfall Security Solutions; Lloyd Colegrove, Fundamental Problem Solving Director at Dow Chemical; and Ted Wasserman, Product Manager at Tableau Software.



▲ At the Fuels and Petrochemicals Div. Welcome Session, David Rosenthal, Owner of the Reliability Strategy and Implementation Consultancy and AIChE's 2012 president, discussed reliability as "The Next Revolution in Process Manufacturing."



▲ AIChE President Cheryl Teich (center) congratulates Spring Meeting Program Chair Joseph Powell (left) and Co-Chair Wendy Young-Reed (right) on the successful conference.



▲ At the Spring Meeting Luncheon, Markus Scheller, Site Manager at BASF, advised attendees to "Never Underestimate the Importance of People."



▲ Panelists at the Engineering Diversity Initiatives Workshop included (from left): Chastity Harmon, Manager of University Relations and Diversity Outreach at Praxair; Audrey Goins Brichi, Manager of Diversity and Inclusion at Chevron; Karen Horting, Executive Director of the Society of Women Engineers (SWE); Zenaida Gephardt, Associate Professor at Rowan Univ.; and Rodolfo Jimenez, STEM Coordinator at the Univ. of Texas at Austin. See the related article on p. 55.

▶ AIChE past director Rosemarie Wesson (left) talks with Mary Kathryn Lee, past chair of the Minority Affairs Committee, at a Board of Directors' reception for AIChE leaders.



▲ Friends and colleagues, old and new, enjoyed the meeting's many social events and receptions.

### AIChE Thanks the Meeting's Corporate Sponsors

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## AIChE Financial Statements, Year Ended December 31, 2014

### Statement of Activities

#### Revenue:

Dues and other membership revenue	\$4,377,376
Publication sales and subscriptions	2,330,223
Industry technology groups	7,661,088
Meetings and technical programming	6,146,627
Education services	2,980,207
Financial services	733,473
AIChE Foundation contributions	1,305,829
Other revenue	376,866

**Total operating revenue and support \$25,911,689**

#### Expenses:

##### Program related:

Membership	\$3,295,609
Publications	2,302,552
Industry technology groups	6,619,140
Meetings and technical programming	3,733,097
Education services	3,040,797
Financial services	189,277
Other program support	1,194,570

**Total program related \$20,375,042**

##### Support services:

General and administration	\$3,787,924
Fundraising	1,172,295

**Total support services \$4,960,219**

**Total operating expenses \$25,335,261**

**Change in net assets from operations ... \$576,428**

#### Non-operating activity:

Investment return, net	\$799,749
Pension related changes other than net periodic pension cost	(1,206,419)
Postretirement related changes other than net periodic postretirement cost	(194,953)

**Total Non-operating Activity \$(601,623)**

**Change in total net assets (25,195)**

Net assets at beginning of year 17,951,533

**Net assets at end of year \$17,926,338**

### Statement of Financial Position

#### Assets:

Cash and cash equivalents	\$2,819,414
Investments, at fair value	21,030,547
Accounts receivable, net	2,712,779
Prepaid expenses and other	272,165
Pledges receivable, net	329,799
Property and equipment, net	2,280,939

**Total assets \$29,445,643**

#### Liabilities and Net Assets:

##### Liabilities:

Accounts payable	\$1,827,798
Deferred revenue: dues, subscriptions and other	5,009,249
Accrued expenses:	
Employee vacation and other benefits	445,307
Pension and other postretirement benefit costs	3,189,474
Other	1,047,477

**Total liabilities \$11,519,305**

##### Net assets:

Unrestricted	\$16,160,852
Temporarily restricted	631,826
Permanently restricted	1,133,660

**Total net assets \$17,926,338**

**Total liabilities and net assets \$29,445,643**

This is a condensed version of the 2014 financial statements of the American Institute of Chemical Engineers.

The financial statements and the full audited report are now available at [www.aiche.org/financial](http://www.aiche.org/financial).

AIChE's net asset level remained relatively flat in 2014. Operations contributed \$0.6M to the total net assets. Operating businesses that exceeded budget include: Industry Technology Groups (\$351K), Education (\$268K), Publications (\$147K), and Membership (\$70K). Below the operating line, investment returns in the Permanent Fund contributed \$0.8M to the overall results. The Pension Plan adjustment for 2014 was a charge of \$1.2M to the pension plan liability, mainly resulting from a decrease in the interest rates, bringing our Plan to an 84% funded level at year-end. Overall the 2014 net assets remained at the 2013 level of \$18M.

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## Leadership Opportunities

Savvy AIChE members make the most of their membership benefits by pursuing the many opportunities to enhance their skills and build a diverse network. However, some members may not realize that there are also opportunities to give back to the profession and raise their personal profiles in the chemical engineering community by becoming an Institute leader.

AIChE's lifeblood is its member volunteers — dedicated ChemEs who use their knowledge and experience to help shape the future of the profession. As the Institute continues to expand its reach, the need for committed volunteer leaders is growing.

AIChE offers many ways to get involved as a leader. If you have an AIChE local section in your geographic area, it probably needs someone to help organize an event, work on outreach programs, or communicate with chemical engineers in the area. If you prefer to work in a virtual setting, AIChE has 23 global committees that help shape the policies and objectives of the Institute. Examples include the Young Professionals Committee (YPC), which serves the professional development needs of members in the early stage of their careers; the Minority Affairs Committee (MAC), which promotes diversity in the profession; and the Women's Initiatives Committee

(WIC), which helps guide AIChE's support for women in the engineering workplace and in Institute activities.

AIChE also has more than 20 technical divisions and forums — whose volunteer leaders develop programs and activities that serve the interests of members in diverse sectors of chemical engineering practice.

Additionally, AIChE's Fellows Council is calling upon the Institute's Fellows to identify strategic issues that will influence the practice of chemical engineering and its impact on society into the future. AIChE Fellows are encouraged to complete the Volunteer Interest Form at [www.aiche.org/fellows-volunteer-service](http://www.aiche.org/fellows-volunteer-service).

### For International Members

With the expectation for AIChE's continued growth in both membership and programming outside the United States, the AIChE International Committee has been creating regional work groups to support chemical engineering's developing communities. If you reside or are involved in the chemical engineering practice in Africa, East Asia, Southeast Asia, Europe, Latin America, or the Middle East, your help is needed. Please contact James Abel, Membership Associate at AIChE, at [jamea@aiche.org](mailto:jamea@aiche.org), and he will help get you connected.

## Diversity Workshop Sets Agenda for Summit at Fall AIChE Annual Meeting

Members of AIChE's Societal Impact Operating Council, Women's Initiatives and Minority Affairs committees, and other groups recently collaborated on a session devoted to improving inclusiveness in the Institute and the chemical engineering profession. The Engineering Diversity Initiatives Planning Workshop, held on April 27 at AIChE's 2015 Spring Meeting and Global Congress on Process Safety in Austin, TX, allowed participants to share personal perspectives on how AIChE can best serve underrepresented chemical engineers in the AIChE community, including lesbian, gay, bisexual, and transgender (LGBT) members, and engineers with disabilities. Discussion groups identified several opportunities for program development, which will be explored in depth at a Diversity Summit to be held at the 2015 AIChE Annual Meeting in Salt Lake City, UT, Nov. 8–12.

At the workshop, AIChE President Cheryl Teich compared creating a truly inclusive organization to that of instilling a safety culture in companies. "It's not enough to merely comply with a plan. A different level of commitment is needed," said Teich. "Inclusiveness needs to be in an organization's DNA."

Representatives from several organizations with effective

inclusiveness and diversity programs were on hand to stimulate the discussion. Audrey Goins Brichi, Manager of Diversity and Inclusion at Chevron, discussed Chevron's commitment to diversity as a business imperative. Chastity Harmon, Manager of University Relations and Diversity Outreach at Praxair, discussed Praxair's multifaceted inclusiveness strategies. Karen Horting, Executive Director of the Society of Women Engineers (SWE), talked about SWE's focus on women's professional and leadership skills development, and attention to such cultural factors as unconscious bias. Finally, Rodolfo Jimenez, STEM Coordinator at the Univ. of Texas at Austin, discussed UT's programs to mentor and prepare underrepresented youth for college engineering studies.

Some of the action items to be elaborated at the Annual Meeting's Diversity Summit include sharing of diversity best practices among AIChE groups; development of a statement highlighting the benefits of inclusiveness; online groups for engineers with disabilities; mixers for LGBT members and their allies; networking events for student members from underrepresented groups; and identification of diversity champions across AIChE communities.