



# NJAIChE Newsletter

NJ's oldest section – over 50 years of service

Volume 14 Issue 1

January 2007

# **CHAIRPERSON'S CORNER**

Season's greetings to all our members! On behalf of the New Jersey Section and the Executive Committee I want to wish all of you a happy and a healthy New Year.

In my last message to you I wrote about our plans to experiment with meeting formats and broadening the range of meeting topics. True to our promises, one of the recent meetings was devoted to financial planning and our last meeting of the year was a Holiday party. I should also add that both of these meetings were free of charge. I wish I could tell you that the attendance at these meetings went through the roof, but we are not there yet. We are seeing some progress, however, and will continue trying new things in the pursuit of a viable and active Section. Needless to say, we welcome your ideas and participation in the Section's activities.

On a separate note, I wish to extend congratulations to our member,

# **David Greene, on his election to the Grade of Fellow.**

I look forward to meeting many of you at our monthly membership and Executive Committee meetings.

Respectfully, Yasha Zelmanovich

# 2006 Section Officers

# **Chairperson:**

Yasha Zelmanovich

# **Chair-Elect:**

Geoffrey D'Netto

#### **Treasurer:**

Patricia Forgang

# **Secretary:**

Andrew Soos

# **Past Chair:**

Glenn DiGiovanni

# **Directors:**

Chandra Nair

Phil Messina

Tom Smith

Alkis Constantinides

Jeff Frankenberg

Preeti Kamakoti

David Greene

# **Director Emeritus:**

Frank Dittman



# National Engineer's Week: February 18-24 (53<sup>rd</sup> Anniversary)

Being an engineer is a responsibility to society as well as a vocation. There are many youngsters out there who do not know what they want to be buy yearn to be constructive and productive.

Meet the real movers and shakers in our world. Engineers design structures to stand up to earthquakes and they travel into outer space. From computer chips to potato chips, their work makes a world of difference in our lives. They are practical inventors and problem solvers. Engineers and their work are everywhere!

With that as an introduction, do you want to help?

Join the section support of National Engineer's Week by going to your local school, YMCA/YWCA, library of whatever group and telling them you are proud to be an engineers and this is what I do as well as how one learns to be an engineer. Start with the schools that your children go to for example. You can go to: <a href="https://www.eweek.org">www.eweek.org</a> for further information, programs and hints.

You can also contact Andy Soos (andysoos@optonline.com or 908-604-2693) or any section officer for advice or financial assistance.

# **Xmas Party**

On December 12<sup>th</sup> our section had a holiday party. There was fun and drinking games (courtesy of Olivar and Haddad). Afterwards not a creature was stirring and to all... Merry Christmas!

# 2006 College Bowl

It was an amazing come from behind victory for the Cinderella team from Seton Hall. Steadily behind all night they launched a successful last second assault and won! The Chemistry majors beat the favored engineers!

Glenn DiGiovanni was the new MC after a great decade from the legendary and tough "retiring" Phil Messina. Phil looked on as Rutgers, Seton Hall, NJIT and Princeton fought.

Andy Soos continued in his supporting role as the "Vanna White" of the NJ section. Geoffrey D'Netto debuted as the timekeeper. Yasha Zelmanovich and Laura Olivar acted as the impartial judges

# Salaries and Jobs

According to the National Association of Colleges and Employers, Class of 2006 Chemical engineering majors topped the list of offered starting salaries with some offers topping \$65,000.

Overall average chemical engineers can expect an average base salary of up to 111,000 for those with a senior level of experience. Bonus (if any) would be more as well as unusual assignments such as overseas.

Career Engineer is still the only job posting system built exclusively for chemical engineers. New listings appear daily. Be sure to visit Career Engineer at <a href="http://www.aiche.org/apps/careerengineer/index.asp">http://www.aiche.org/apps/careerengineer/index.asp</a>



# MEMBERSHIP RENEWAL

In the fall most if not all of us who are members will Renew our membership to AIChE and our local section Some of us will get mail reminders. One can renew at <a href="https://www.aiche.org">www.aiche.org</a> also. Simply sign in as a member and select the menu option for *renew membership*.

# **LOCAL SECTION COMMITTEES**

- Government Interaction
- Professional Development
- Membership
- Publicity
- Public Relations
- Awards
- Programs
- Fall Lecture Series
- Spring Symposium

Volunteers are needed for all of the above listed committees. To volunteer, contact any section officer.

# **Attention Volunteer Leaders**

AIChE President John Chen would like to acknowledge your contributions by writing a letter of recognition to thank your superior and colleagues for supporting the time and effort you give to AIChE. To receive a 2006 letter of recognition please complete the Volunteer Recognition Request Form at

http://www.aiche.org/LocalSections/Resources/index.aspx and return to mailto:vma@aiche.org by January 12, 2007. Thank you again for all that you do to help build value for your fellow members.

# Advertising Rates:

# Annual:

\$ 300.00 per page

\$ 150.00 per 1/2 page

\$ 75.00 per 1/4 page

\$ 50.00 per business card

# Per Issue:

\$ 200.00 per page

\$ 100.00 per 1/2 page

\$ 50.00 per 1/4 page

Contact the section secretary for details and questions.

# **Phil Messina Services Award**

In October Phil was awarded the Section Services Award for his outstanding contributions at our dinner meeting. He is a past local chair, a likable and good person, AIChE Fellow, and the "father" of the College Bowl. We are proud to have him in our section.







2006 College Bowl: In order left to right: NJIT, Rutgers, Princeton and Seton Hall





# **Engineers in Decline?**

As far back as May 2005, the Chief Editor of Chemical Engineering magazine, Mr. Nicholas Chopey, echoed the remarks of the recently retired Exxon-Mobil president, Dan Sanders, that there are signs of decline in the inflow of tomorrow's scientific and engineering talent due to the lack of student interest at the pre-university level. He did not provide the reasons, but recommended steps to change the situation. One of the reasons could be as one reader wrote to the Chemical Engineering magazine that "I would never recommend engineering to my son or daughter due to the fact that engineers are handled like contract labor". Another reader wrote to the same magazine that "Engineers should avoid corporate employment as it's an unstable environment where one is subject to reassignment, relocation, and termination without notice".

About a year later the Editor at Large, Mike Spears, of Chemical Processing magazine quoted from a recent poll on behalf of Bayer which highlighted the concerns of 100 CEOs of the fastest growing U.S. Science, Technology, Engineering and Math (STEM) firms. 80% of the executives think the nation is in danger of losing its global predominance in because of a potential shortfall in the number of scientists and engineers coming out of universities. Bayer Corporation carried out the survey as part of its Making Science Make Sense (MSMS) program which is aimed at advancing science literacy across the nation.

Currently Bayer is running local MSMS programs at 12 of their sites involving more than 1000 employees as volunteers.

Is this concern justified? Al Gray, Executive Director of the National Society of Professional Engineers (NSPE) believes that engineering continues to be a viable and in-demand profession, based on the recent salary survey sponsored by NSPE. The salaries may be attractive but as another reader wrote, the trick is to consider oneself as an engineering professional, much like a doctor or attorney, and keep looking after one's own interests at all times and this is done by keeping a close eye on the financial situation of your employer and provide for your own financial security and your retirement.

What do you think!

Send us your thoughts:

(andysoos@optonline.com)



# The Year Past and the Years to Come A note from John Chen, 2006 AIChE President

The year 2006 has been a good year for chemical engineering profession, with high employment, top salaries, increasing college enrollments, and good profits for the chemical industry. This also has been a good year for AIChE. My term as AIChE president is coming to its close and I take this opportunity to look at this past year, and present some thoughts on the years to come.

In my inaugural address at the 2005 Annual Meeting, I raised up several goals and objectives for our Institute: Maintain sound fiscal management

- Enhance relevancy of programs and activities
- Enlarge the playing field, internationally
- Activate the Institute on the energy/sustainability challenge

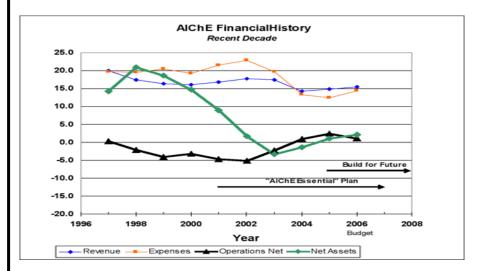
All of these objectives have potentially beneficial impact on AIChE's most significant concern -- improving membership. Let's see what was actually accomplished.

#### **Fiscal**

We had a good year! While there are yet several weeks to end of the fiscal year, it appears that:

- Income will exceed operating expenditures by at least \$1 MM
- Net assets will increase by at least \$1MM, possibly by as much as \$1.9 MM.

We've done well! But – I would like to emphasize the need for continued fiscal discipline. The following graph shows this year's result in a longer-term context.



In this decade, we have recovered from a financial crisis, but are still living with a tight margin. Inflation will exert pressure on the operating balance, and the interwoven issue of membership must be solved. The Board and the Executive Director are determined to sustain a disciplined management of the Institute's finances.

### **Membership**

While membership remains a central concern for our Institute, I am pleased to tell you that for the first time in 7 years AIChE has gained rather than lost members. The gain itself—100 members—is rather modest but it is testimony to the strength of our offerings and the ongoing efforts of volunteers and staff that we are again growing. Going forward, it is imperative that we combine strategic program enhancements with strong marketing, to maintain this momentum and continue to build membership growth.

#### **Initiatives**

The other three goals are all initiatives to enhance AIChE's position as a premier chemical engineering society. We know that cost cutting alone does not lead to long-term health; program enhancements are necessary to increase the value and relevance of membership. Hence, the three initiatives started this year.

#### **A. International Developments**

A third of the Board of Directors (BOD) was charged as a Leadership Team to develop strategies for "enhancement of Institute programs in aid of the chemical industry and individual members in the global economy", and to improve "AIChE's position as the premier chemical engineering society", internationally. Here are a few of the accomplishments in '06:

- 1. Initiated or stepped up interactions with engineering societies in China, India, Taiwan, Europe, Egypt, Australia, and New Zealand.
- 2. Recruited international corporate members for our Center for Chemical Process Safety (CCPS) Sinopec in China and Petronas in Malaysia.
- 3. Obtained corporate sponsorship for 80 new AIChE members in China.
- 4. CCPS outreach to China in a Process Safety Management course in this past fall.

#### **B. Energy/Sustainability Activities**

Another third of the BOD was charged as a Leadership Team to develop strategies for "development of AlChE's activities and programs in energy technology, policy and education". Some of the activities and accomplishments are:

- An Energy Commission comprised of leaders from industry, academe, and NGOs considered and advised on suitable activities for AIChE
- 2. An Energy Forum was held at '05 Annual Meeting to hear opinions and suggestions from the membership.
- 3. A Critical Issues Forum on energy and sustainability was held at the '06 Spring National Meeting.
- 4. Thirteen projects were identified and proposed for continuing or future activities. Seven were selected as high priority in such areas as meeting programming, graduate fellowships, information distribution to profession and public, and energy system metrics.
- 5. With enthusiastic sponsorship by many entities within AIChE, programming on energy and sustainability topics increased at national meetings to approximately 60 sessions at the '06 Annual Meeting and 80 sessions at the '07 Spring National Meeting.

#### C. Relevance and Membership

The final third of the BOD formed a Leadership Team on Program Relevancy and Membership Improvement. The charge to this Team was to develop strategies and activities for "improving the Institute's portfolio of programs in terms of its relevance for current and future members". Some of the activities and initiatives are:

- 1. Focused attention on two large, underserved segments of AIChE members: industrial users of technology (plant operations, design, construction, etc.) and young professionals in the first years of their careers.
- 2. Development of alternative meeting formats, tailored for industrial professionals regional, fewer days, focused on segments of industry, etc. CTOC task force working on "Meeting within a Meeting".
- 3. Promotion of meetings/symposia by local sections, with examples in this and past years.
- 4. Organization of specific programs at the Spring National Meeting '07 to provide tutorials and training for young professionals in industry.
- 5. Focused attention on student members at colleges, and in their transition to regular membership upon graduation.
- 6. Campaign to raise funds from industry to sponsor AIChE student membership for undergraduate students in chemical engineering.

#### **Points of Note**

Many, many entities within the Institute (e.g. Operating Councils, Divisions, Forums, Committees, Staff, etc) were responsive to the challenge of the three initiatives. The Board's Leadership Teams sought to focus attention, develop strategies, and energize the staff and membership. Ultimately, ownership of the programs and activities will be with the membership.

Clearly, most of the program initiatives and enhancements have just gotten started. Their fruition will take both effort and time. All three Board Leadership Teams have elected to continue with their missions in 2007, and look forward to increased interactions with the body of our Institute to move the initiatives forward.



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Even while new initiatives are being pursued, AIChE maintains its traditional strength in quality of technical and scientific exchanges. The AIChE Journal remains the premier publication in the profession, with world leading impact factor. Our national meetings are the preferred venues for presentation of frontier research and developments. The Annual Meeting just concluded in November was the largest single meeting of chemical engineers ever, with total attendance (including students) of approximately 5,400.

I was strongly impressed by the level of dedication within membership and staff to our Institute. No individuals were credited in listing accomplishments above, because there were so many who gave of time and effort. This inherent characteristic of AIChE is a real strength for our Institute.

In the midst of enthusiastic suggestions for enhanced activities, we remember the continued need for fiscal discipline. A new procedure was instituted, and a new Board Task Force was charged, to thoughtfully prioritize proposals – moving AIChE forward, but staying carefully within fiscal bounds. Of the 40+ proposals arising from the three initiatives, the Prioritization Task Force selected 14 for first implementation. This disciplined prioritization approach will be continued in coming years as we move forward.

Looking ahead, we see two additional items of special importance.

a) Recognizing the importance of AlChE's three Operating Councils (OCs), the Board is working with them to clarify their roles and charters, and to seek improved interactions between the OCs and the BOD, and between OCs and the entities in their care. Another new Board Task Force undertook to lead this work, and is following up on resolutions developed at a special meeting of the Board with leaders of the Operating Councils at the recent Annual Meeting.

b) In 2008, AIChE will celebrate its centennial anniversary and the Centennial Committee is hard at work planning for that landmark occasion. Also on the horizon is the need to plan for leadership succession. In preparation for that event, and recognizing the significant changes that have occurred in AIChE and in the professional environment, a Task Force was charged by the Executive Committee to re-examine the role of the AIChE's Executive Director. This Task Force will report out to the BOD in 2007.

In closing, I'd like to say:

- I am very optimistic for the future of the chemical engineering profession. No other profession has core competencies tailored so well to
  address the grand challenges that face humanity and society in coming decades (e.g. energy needs with concomitment to sustainability).
- I am also optimistic for the future of AIChE, so long as we constantly seek improvements in relevancy of programs and activities for our stakeholders, and simultaneously keep fiscal discipline.
- I thank the many, many individual members, Institute entities, staff, volunteer leaders, and members of the Board who have given me input and guidance, enthusiastic support, and contributed their time and efforts. Our members and staff are great groups to work with.
- Lastly, it has been an honor and a great pleasure for me to serve as AIChE President in 2006. I thank the membership for entrusting me with the care and nurture of our Institute this year.

Sincerely,

John C. Chev. John C. Chen