Bill Swartz (member #835), chairman of the Marketing Committee, gave a thorough analysis of ACC&CE's makeup at the October meeting of Council.

Mr. Swartz used our 1996 directory to examine who we are, where we live, the distribution of our ages, what are degrees we hold and other characteristics. Bill has considerable marketing experience in industry and knows that to carry out a new marketing plan his committee must know where we are strong and where we must improve.

These are some of the conclusions he reached:

- New Jersey is the focal area of the current membership (43%)
- Second and third areas are New York (24%) and Pennsylvania (16%)
- More than half the members are probably over 60 years old
- More of the recent recruits are chemists rather than chemical engineers
- Just over half the members hold the PhD degree
- Only half the members who joined in the years 1984 to 1994 are still members

Based on these data and with an eye for the future, Swartz proposed some marketing initiatives to put ACC&CE on a growth curve. These are outlined in "MARKETING COMMITTEE PROPOSES PLAN" listed below.

COUNCIL ACTIONS FOR THE YEAR 1996-97

The year has been one of self-analysis, action and planning for the future. President Ernie Coleman has stimulated Council to continue the expansion of ACC&CE's presence on the world wide web (a move started by past-president Elliott Weinberg), to overhaul the client referral system and to undertake marketing measures that can expand the reputation of the association and bring in both more requests for consulting services and more members.

The Executive Secretary position underwent a change in March. Beth Kennedy Jones left the post to devote herself to professional theater activities and family and Council engaged Linda Townsend as her able replacement. The official location of the offices were moved from the Chemists Club in New York City to the town of Sussex, New Jersey. Telephone, FAX and E-mail numbers remained unchanged.
Membership, which started in November at 130, dropped by February to 120 and built back to 125 by April and then fell again to 116 by October. This pattern has been seen in years before. This one is the consequence of 14 more resignations than new additions. It indicated to Council that member retention needed more work.

The development of the new Internet web page was managed by Steve Duerr, our Treasurer, and Marty Goffman. They located a computer consultant willing to do the work for under $1,000. Members were invited to help finance this by each contributing $25 so as to have their own consultancy listed in a Directory section. Thirty-nine members sent their checks and the work was undertaken. The total number now listed on this page is 43. More members are being added under the same conditions.

Council recognized that the consulting leads that come to the office as Clearing House Inquires (CHIs) are one part of member benefits. Council sees that a strong marketing and public relations effort is needed. With more CHIs there should be more consulting leads for members, fewer resignations and more interest by other consultants for becoming new members. Dave Armbruster and Bill Swartz worked up specific plans to improve marketing.

The client-inquiry Clearing House system that has been in place for many years was overhauled. Council approved a new system to take its place. No longer will an incoming request for names of a few member consultants be selected by staff and volunteers. Using E-mail and Fax transmission, the office now sends all CHIs immediately those members whose offices are equipped to receive them. Other members receive a monthly report. All members are able to contact the prospect and make individual arrangements.

**ACC&CE E-MAIL AND WEB PAGE ADDRESSES**

The September-October issue gave a complete list of the electronic communication addresses of ACC&CE members. There have been additions and changes, as follows:

**New E-Mail addresses**
- Charles J. Conway  cdyh66a@prodigy.com
- Don Mosher  drmosher@earthlink.net
- Vincent Venturella  vincev@prodigy.net

**WHY SO MANY MEMBERS' NAMES AND NUMBERS?**

You may have noticed that the copy in this newsletter is now sprinkled with the names of members. This is the result of the editor's wish to stimulate cross-fertilization of interests among the membership of ACC&CE. During ten years of service to Council as secretary, he frequently heard a call for mechanisms for bringing members of like specialties and expertise together, the better to offer a team effort to a client.
Although efforts have been made to implement this idea, none has succeeded. This editor is trying another method: highlight activities of specific members with the hope of stimulating member-to-member communications. Send news of your activities. Another member will read of it, see your member number, look you up in the directory and call you. It may work!

GEORGE WILL ON RISK

In a recent syndicated column George Will taught a lesson in perceived risk. Will cogently elaborated on what the chemical industry has been trying to say for years, that any personal risk is compounded of both the inherent risk of the threat and the exposure of the individual to that risk. He also restated the important idea that, for and individual, the risk taken voluntarily (controlling the exposure) is acceptable while the risk beyond the individual's control (weather, air quality, earthquake, wind and fire) is in another category. Will pointed out that it is these involuntary risks that the public demands protection from by government, corporations or other higher authority.

Will sensibly highlighted the role played by the media. The awfulness of a new risk, or an old risk recently the subject of a new study, is most of what makes up such a TV news minute. The stories about technological advances that have been and are reducing the inherent risks of modern life appear in the more esoteric parts of the media: public television, the inside pages of the newspapers and so on.

Such a story was on the inner pages of the New York Times of November 16, 1997. That was eight column inches about risk to humans of cancer from pesticides. The article quotes a doctor from The American Cancer Society as saying "A diverse diet that has plenty of fruits and vegetables is very important in reducing cancer. Compared to that, the risk of cancer from man-made chemicals is negligible."

MARKETING COMMITTEE PROPOSES PLAN

Based on the above description of the current characteristics of ACC&CE's membership, Bill Swartz made some challenging proposals, as follows:

1. Establish and maintain several mailing lists of:
   - other technical societies and their local sections
   - publications that serve consultant-using markets
   - prior clients of ACC&CE members
   - potential new members

2. Mail promotional releases such as:
   - announcements of meetings and special ACC&CE events
   - updates of information about ACC&CE, its members and happenings
   - copies of "The Chemical Consultant" newsletter

3. Overhaul the directory to present a more business-like appearance
Swartz pointed out that such a marketing program would increase the association's costs. Cutting current costs is unlikely to produce enough funds to do the job. Increasing membership is his recommended course.

Swartz's opinion is that current new-member criteria seem to be unnecessary restrictions on growth. He proposes that qualified technical consultants who do not have any clients and those who are not chemists or chemical engineers should be eligible to apply for membership.

Opening up the pool of member prospects would lead to a considerable increase in membership, accompanied by new dues income. This would permit the kind of marketing activity outlined above. Swartz also made the point that his committee needs to be expanded to include other members who will help to implement new marketing steps. He does not favor engaging any outside service at this time.

All members are invited to provide their opinions and ideas. Send them to Bill Swartz.

**DISTINGUISHED MEMBER AWARDED OTHMER MEDAL**

Dr. Ralph Landau (member #205) has been honored by the Chemical Heritage foundation with the award of the first Othmer Gold Medal for his many achievements in a long career of chemical engineering. The foundation also cited his writing and speaking on the subject of the history of chemical engineering and the impact that chemical engineers have made on society and human welfare.

The medal is a memorial to the late Dr. Donald Frederick Othmer, one of the founders of the Kirk-Othmer Encyclopedia of Chemical Technology with a long association as professor at Brooklyn Polytechnic Institute.

We are proud of one of senior members of long standing.

**ACC&CE MAKES SHOWING AT CHEM SHOW**

Chem Show booth manager Dick Cowell (member #720) reports that he was assisted by 15 volunteers (14 members and 1 associate) in New York on November 18, 19 and 20. This cadre made contact with an estimated 300 of the show attendees. They garnered 48 leads for consulting services, 11 leads for new members and registered 27 others. At least another 60 picked up ACC&CE brochures for consulting services and/or membership.

About 10 order forms for copies of the 29th edition of the ACC&CE directory "Consulting Services" were received during the show. Copies of "The Chemical Consultant" newsletter were available in the booth and were distributed to other exhibitors by both the Editor and the Booth Manager. The Editor also placed copies in the Press Room.

Cowell sends thanks to the following for their help in manning the booth at the show: Robert Manley, Kelvin Domovs, A.O. Zoss, Gerard Gizinski, Elliott Weinberg, Dave Armbruster, Anthony Metzner, Peter Hay, Meyer Rosen, Tony Zembrodt, Bill Swartz, Donald Belcher, Richard
Jim Divine (member #769), a new member of Council, is a registered Professional engineer and a certified corrosion specialist. He has been consulting since leaving Battelle Pacific Northwest in 1991.

In 1996 he established a listing of consulting engineers that now has 17 engineering members. The names and brief resumes are part of an Internet page with the name "www.consultingengineers.com".

Divine has just expanded the listing to include consulting scientists as well. He has invited all members of ACC@CE to become members of his listing -- Consulting Engineers Worldwide. He has set a $50 fee to cover costs of maintaining a listing on his server and altered the title of the group's title to "A listing of Consulting Engineers and Scientists".

The name and Internet address of ACC@CE is listed as well as the resume of one member of ACC@CE, Charles Garber (member #533). This independent effort by Divine promises to broaden the exposure of the existence of our group and should increase client inquiries to members. Call Jim at (800) 570-2309 for more details or contact him at divine@owt.com.

Jim Divine is not the only member of ACC@CE that has charge of a consulting group. Erie Coleman, our president, heads a similar group in Connecticut, named The Technology Group. Maybe there are more that the editor of this newsletter doesn't know about. Drop a line.

**HEAT EXCHANGER IN WHALE'S TONGUE**

Chemical engineers may think they have learned all the designs of heat exchangers but they may have to brush up on oceanography. Marine biologists in California reported in the magazine Science (Vol. 278, p 1138) the results of their study of the structure of the tongue of the Gray Whale. This warm-blooded mammal is a filter feeder and must process hundreds of gallons of ice cold water to capture one mouthful of small fish and shrimp.

The whale's tongue acts as a plunger to push the food-laden water through the baleen structure that holds back the food. To do its work, it must use its many muscles to change shape as the mouthful is processed. If the tongue were to get too cold, the tongue muscles would be would inefficient.

It turns out that the arrangement of blood flow in the whale's tongue counteracts the chilling of these muscles. Temperature drop is minimized by an arrangement of arteries and veins that function as efficient heat exchangers. Hot blood flows into the tongue in large arteries surrounded by closely-packed smaller blood vessels carrying cooled blood back to the heart. Transfer of heat warms the chilled blood in the small veins, which, because of their larger number and smaller diameter and greater total surface area are able to transfer that heat efficiently to the surrounding muscle tissue.
Human beings are not the only good designers of heat exchangers.

**DOW CHEMICAL GOES TOWARDS SPECIALTY CHEMICALS**

As 1997 drew to a close, The Wall Street Journal interviewed Dow's CEO, Wm. S. Stavropoulos. He outlined strategies that should take Dow into the 21st century with not only improved productivity from recent streamlining but also a conscious shift away from commodities like polymer materials, metals and basic chemicals more towards specialty plastics (emulsion polymers, coatings and engineering plastics) and specialty chemicals (agricultural chemicals, adhesives and coatings).

The figures in the following table show the pattern of this shift, as measured by operating income.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodities</td>
<td>73%</td>
<td>62%</td>
<td>44%</td>
</tr>
<tr>
<td>Specialty Plastics</td>
<td>8%</td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td>Specialty Chemicals</td>
<td>19%</td>
<td>26%</td>
<td>39%</td>
</tr>
</tbody>
</table>

It might seem that these changes in a giant company would not have significance for independent chemical consultants. However it may just be that it will be more cost-effective for Dow to call on the depth of formulating, processing and marketing experience of seasoned consultants rather than to try to build back downsized forces to meet the decision-making and marketing demands of many of these specialty products.

**ACC&CE WEB PAGE**

The Internet committee of ACC&CE has recently updated the home page. The URL is [chemconsult.org]. There are now 43 members listed in the section called "DIRECTORY". This is where members who have contributed $25 have a brief resume and an electronic address. This section is equipped with a search"engine" so that a prospective consultant can search the miniresumes for consultants who are expert in specific fields. After making a search and choice they can communicate directly with the member consultant by E-mail. The volume of Clearing House Inquiries (CHIs) has been increasing. In November 3 out of 10 CHIs came to the home page. In December it was 7 out of 11.

**HAVE YOUR OWN WEB PAGE**

You may be one of the ACC&CE members who don't have a web page for your own consulting practice. Jon Chakoff, the computer consultant who has created and upgraded www.chemconsult.org, has offered to create one for you at special rates to members. If you are interested, here's how you contact him: E-mark.net - 117 W. Mt. Pleasant Avenue #120, Livingston, NJ 07039, 973-597-1000, e-mail: info@e-mark.net. Don't forget to identify yourself as a member of ACC&CE.
FROM THE EDITOR:

We know that you received the September-October issue, our first effort. You must have liked it because we didn't hear any complaints.

We heard from only one of you that you were pleased. This issue and the ones to come will better serve your interests and the good and welfare of ACC&CE if we get input.

Please consider writing a note or sending E-mail [Peter-Hay@worldnet.att.net] with suggestions, beefs, kudos or news. Send a "letter to the editor" on any subject and we will print it. Peter Hay, Editor