



NEWSLETTER---

THE CHEMICAL CONSULTANT

Association of Consulting Chemists & Chemical Engineers

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CONSULTANTS PARTICIPATE IN 1999 CHEM SHOW

MEET US AT OUR BOOTH

This year the Association of Consulting Chemists and Chemical Engineers displays its services at CHEMSHOW, the definitive CPI trade show. Find us at Booth 2405, located close to the right-hand entrance at the front of the exhibition hall at the head of the third row on the right. We are across from 3M Filtration Products.

You will find consultants on duty with their back-up materials. Stop and get acquainted, ask questions and pick up informational materials. Register your stop so we can reach you later. We have found that show attendees like the relaxed convenience of making contact with our independent consultants. You may get technical help on the spot or a suggestion of another ACC&CE member with pertinent expertise. This is also an opportunity to find out about becoming a consultant and seeing some of the advantages of membership.

The Association has a web site www.chemconsult.org and the booth consultant can tell you about it and how it offers worldwide access by clients to the technical services of ACC&CE members.

MEET US AT OUR BOOTH

On Wednesday, November 17, ACC&CE will hold a monthly dinner meeting. The speaker is Dr. Michael J. Block, Editor, CHEMTECH Magazine. His topic is: "Where Have All the Chemists Gone?"

You are invited to join us at 6 pm in the Lounge of the Chemists Club, just off Times Square at 40 West 45th Street for drinks. At 7:45 we sit down to an elegant dinner and hear the guest speaker. See the sidebar for reservation information.

When the exhibition closes at 5 pm come mix with Association consultants and guests, enjoy a gourmet meal and a talk and discussion on a topic important to all of us and our futures.

Currently ACC&CE dinner meetings are held in New York City and northern New Jersey. There are plans to organize regional regular lunches or dinners.

ACC&CE INFORMATIONAL SYMPOSIUM

ACC&CE Members speak at the Chem Show educational conference, 9 am--12 pm, Wednesday, November 17 on "How To Be A Chemical Consultant in the Next Millennium". MEYER ROSEN, Symposium Chairman.

ROBERT J. BOCKSERMAN "Chemical Toxicology, Safety and Handling of a New Chemical Product" (How a chemical consultant approaches this undertaking)

ANGELO TULUMELLO "Stumbling Blocks on the Road to Successful Consulting" (Problems all consultants have)

ELLIOTT L. WEINBERG "Will There Be Enough Chemists and Chemical Engineers?" (Can students become interested in chemistry and engineering?)

JOHN C. BONACCI "How To Be a Chemical Consultant In The Next Millennium" (Advice from an experienced chemical consultant)

JOHN BARB "Do What Works (TM), Selling Skills For Consultants" (Fit your approach to the client's needs)

ADVANTAGES OF MEMBERSHIP

The Association of Consulting Chemists and Chemical Engineers is a group of technical consultants with a central business office. Over the 83 years of its existence members have benefited in many ways from belonging. Some stem from the office function that is the communication hub. Others come from member-to-member interactions. The following is a brief summary of some of the advantages or benefits available to members.

RECEIVE ETHICAL AND PROFESSIONAL STATUS

All applications for membership and references are screened by Council. Not all applications are approved. All members sign a detailed Code of Ethics in Consulting. Any incidents of questionable ethical behavior are reviewed by the Professional Welfare and Ethics Committee and by Council. Clients are assured that they are dealing with reputable, ethical consultants.

NETWORK WITH OTHER MEMBERS

Fellow members with deep and varied experience become resources to one another for informal exchange of information and advice. The tradition of the association is to give freely of help to other members and occasionally to team up to serve a client whereby all gain income by providing a combination of special talents or resources from each. The newsletter "The Chemical Consultant" brings information about other members' activities and accomplishments.

LEARN AT MONTHLY MEETINGS

Nine dinner or luncheon meetings per year feature a short presentation, either by an invited guest or a member. Topics range widely and usually are instructive and informational related to improving business and consulting abilities.

HAVE RESUME ON THE ACC&CE INTERNET SITE

ACC&CE believes that electronic communication is an essential component of success. Any member may add his resume to the Internet membership directory, at www.chemconmsult.org. This provides a concise summary of the member's expertise and credentials and instant access by clients to additional expanded information via a hypertext link.

GAIN ACCESS TO CONSULTING REFERRALS

The association maintains a clearing house for inquiries for consulting services that arrive at the office by letter, telephone, FAX, e-mail and directly from the Internet site at www.chemconsult.org. Notices of inquiries are distributed to all eligible members within 3 days. Members are then free to respond directly to an inquiry without further involvement by the office.

RECEIVE TRAINING AND MENTORING

All members, especially new ones, can learn how to set up and develop their consulting practices by taking advantage of meetings and printed materials provided by the Association. In addition, some experienced members voluntarily serve as personal mentors to new members who ask for guidance.

CONSULTANTS' EXPERIENCES

CONVERTING NO-PAY TO SLOW-PAY

One consultant had a client who used a flimsy excuse to not pay for a job well done. He claimed that he had expected an 8-hour presentation of the consultant's report. What he got lasted 6 hours. The consultant asked the client if anything promised had not been delivered. The answer was no. The written proposal had not specified the length of the verbal presentation. The consultant's attorney advised against suing the company, as they were in Houston while the consultant was located in Philadelphia and the fee at stake would not cover the cost to sue. The consultant cut through the clutter and wrote to the head of the client's parent company in Europe, asking whether this is the way he wants his U.S. subsidiary to operate. "Two weeks later we had the check for \$10,000," the consultant reported.

FAR-OUT CONSULTING

This consultant did not get paid except for all expenses to Inner Mongolia and back. The client requested help using a single-ply blown film line to make stretch cling wrap film for hay bales. The plastics expert found he had to advise them new multi-ply coextrusion line was needed. He offered to help find an investor to explore the possibilities in Inner Mongolia for profitable ventures in plastics processing. He also gave lectures on his project, updates on plastics and, as a bonus, how to formulate detergent to clean wool for use in coats. He found the people most hospitable and was treated "royally" (by Inner Mongolian standards). The consultant was very satisfied that he had taken the assignment.

CHEMISTS AND LAWYERS

This consultant was retained by a seed company's lawyers to examine "discovery documents" and advise on technical aspects of the case. The attorneys had file boxes full of evidence that needed

interpretation. Some papers related to the way the product was manufactured. Some were documentation of laboratory seed germination tests; some were reports of farmers' experiences with seed that failed in the field; some were manufacturing records of manufacturing and quality control. The attorneys for both sides were hung up on the validity of each side's germination tests. The consultant showed that the chemical supplier had made substantial changes in the procedure for formulating the product between the time a small pilot batch had been made and approved by the seed company customer and the time of the modified product's manufacture in large quantity by an outside contract processor. The consultant led the plaintiff's attorneys to look at the poor manufacturing practice of the supplier as key issue. The case was settled out of court in the favor of the seed company.

FISHY FALLOUT

This consultant on the West Coast was retained by a vendor of food-handling equipment to solve a problem in a fish-processing plant. After reviewing the operation problem at the plant, the consultant made recommendations both to the user, in terms of better cleaning procedures, and to the equipment manufacturer, for an improved design and material selection. The client was satisfied but the consultant had an extra problem: he and his car smelled like smoked fish for a week afterwards.

CONSULTING BY E-MAIL

Another consultant lives in Vermont and provides expert advice on environment, health and safety anywhere in the world. He may deliver the work product using phone, fax, e-mail and Federal Express. When this involves Government regulations that require that information be supplied in a standard format he easily creates the desired information in final format in a word processing program on his computer and finds that the fastest delivery is by FAX or as an "attachment" to an e-mail message. The FAX format is often satisfactory but, when the client wants an opportunity to read and revise a draft, the e-mail attachment is the most efficient. The recipient retrieves the document from his Internet mailbox and starts working with it. Both sides can review such document, revise it and print it at either location in final form.

A document prepared in a word processing program may contain many additional invisible characters that contain the information about margins, spacing, type fonts, lines and many other details that show up only when working in that word processing program. These will be transmitted to the recipient within the "attachment" referred to above. The consultant finds it essential that both he and his client use the same or compatible word processing programs.

SEMINARS GENERATE CONSULTING

This consultant has special expertise in radiation curing of materials and associated processes. He has presented seminars in the US and Europe for 8 years on this technology and its marketing. He has gained greatly from the effort he has invested in these seminars. It has expanded his list of contacts in the field and his list of suppliers and service sources in the field. Additionally, he has gained consulting contracts from companies that sent employees to his seminar. He recommends these elements for successful seminar operations: focus your product offering and technical expertise; network your contacts; invest money on promotion of each event.

MICROSPHERES FROM SPACE

John W. Vanderhoff, a chemist who was the chief scientist of a National Aeronautics and Space Administration project that produced what was said to be the first commercial product made in space, died on September 18, 1999.

He and associates at Lehigh University had developed a chemical process that made spheres of polystyrene that are 10 micrometers in diameter and totally uniform. They were made in the absence of gravity aboard the orbiting space shuttle Challenger. It was said at the time that perfect spheres that small were almost impossible to make uniform in size on Earth because of gravity. Comparison of photomicrographs of the space-made and earth-made samples show the almost-perfect regularity of the former as compared to the normal randomness of size of the other.

Small samples of these particles had been sold to eight companies, to the Food and Drug Administration and to the University of Utah for use as microscopic yardsticks. There was never any large-scale application of this achievement and the one experiment provided enough material for the use by many microscopists.

Professor Vanderhoff won awards from NASA, the American Chemical Society, Union Carbide and Lehigh. In the 1950s Dr. Vanderhoff was with Dow in Midland, Michigan. He and his team were well known for their advancement of the science and application of polymers. Their work was a follow-up to the wartime creation of large-scale synthetic rubber manufacture by water-based emulsion and suspension polymerization. Large quantities of material for paint, coatings and other applications are now made using refinements of this polymer manufacturing method.

CONDUCTIVE CARBON FROM BAMBOO, NOW AND THEN

"Bamboo may take a pole position in Lithium-ion batteries. Sony Corporation is developing a new carbon-based material made from bamboo, to be used for the negative electrode of lithium-ion batteries. A negative electrode made of the carbonized bamboo has a theoretical storage capacity of 630 mA/g, compared with 372 mA/g for conventional graphite.

"The new carbon material is made by baking thick-stemmed bamboo at 500 degrees C under a nitrogen atmosphere. The carbonized bamboo is crushed to a powder, sieved, and baked again at 1,100-1,300 degrees C under a reduced nitrogen-gas flow. The carbon powder is then mixed with polyvinylidene fluoride powder in N-dimethyl formaldehyde and molded with stainless mesh to form the electrode. Sony has not yet decided to commercialize the material." (Chemical Engineering Magazine August, 1999)

This takes our minds back 118 years to when Thomas A. Edison fabricated filaments for his lamp by bending bamboo strips and then roasting them until they made carbon tough enough to give off light when heated to incandescence. Surviving examples are for sale via internet auction.

FROM THE EDITOR, Peter Hay

The CHEM SHOW takes place every two years and ACC&CE has again has booth space in exchange for taking charge of one of the educational lecture programs in the Javits Center in New York City. This issue is a celebration of our part in this important biennial event.

Inside are descriptions of some experiences of our members and a summary of advantages of membership. Extra copies are distributed at the show as a promotional effort. We hope visitors to the show will get to know us at our booth and perhaps join us for dinner on Wednesday evening at the Chemists Club.

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