



NEWSLETTER---

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STRATEGIES FOR THE LONG RUN by Peter Hay, member of Council and Editor

Let's start by noting that Council has decided to reposition the association and expand it by welcoming as new members technical consultants of other fields beyond chemistry and chemical engineering. I know that the study and discussion by members of Council over the past year has led to the conclusion that survival of our association depends on doing much work that will only succeed if the end product is a larger, more closely knit organization in which members in all locations will feel they have a stake. This calls for a long-range approach.

Sometimes it seems confusing and discouraging when a person or organization wants to undertake long-range planning in place of the easier style of tackling each request or problem as it turns up. It is not easy for us to find and use the methods and means to do the new kind of work needed.

Over the years many professors, trainers and authors have given advice and made life-long careers telling others how to transform an organization that needs overhauling. Most of us have read, listened and attended workshops on this subject. Most of the management training I have been exposed to in my business career has disappointing. I have recently had a positive experience of such training as a volunteer member of the board of trustees of a non-profit organization. I believe that what I have seen can be applied to the repositioning process that the Council of the Association of Consulting Chemists and Chemical Engineers has decided to undertake. I would like to see all members, starting with Council, go through a similar process. I envision participation by all members of the association in the working on the four major parts of the restructuring, as follows.

VISION STATEMENT - An idealistic statement describing the intended end result, ignoring current limitations and avoiding discussing means. All members should be invited to make input.

MISSION STATEMENT - A statement of purposes and reasons for the existence of the repositioned organization, broadly stated and short. Past President David Armbruster and President Bill Swartz have already proposed some. Council should distribute these and ask all members of the association to contribute fresh ideas. Council would write the final statement.

OBJECTIVES - These will be derived from the Mission Statement and represent the various kinds of work necessary to accomplish the overhaul and run the revised organization in accordance with the Mission Statement. These are medium-range, short statements, developed by the standing committees as found in the constitution along with new ad hoc committees.

TASKS - These are short-range items developed for each objective, to be worked out by each committee. What I have outlined will take a lot of time and work. Everyone in the association should take this proposal seriously and immediately tell Council their reactions and suggestions.

2001 CHEM SHOW

ACC&CE will have a booth in the October 23-25 Chem Show. Some members will present a symposium "Consulting As A Second Career" for show attendees during this trade show. Peter Lantos, Martin Goffman, Richard Schauer, Ernest Coleman and Peter Hay will make presentations. This is an opportunity to promote your practice.

ACC&CE PROMOTIONAL PLAN

Considerable work by the Council of the Association of Consulting Chemists and Chemical Engineers has been directed at repositioning this 73 year-old organization for the technical and business realities of the 21st Century. The year 2001 will see the first efforts to put the into effect two major initiatives. One will be directed at candidates for membership; the other at potential clients.

ACC&CE intends to approach the first target audience with a set of presentations by various members before meetings of professional and technical groups across the country. They will make use of the specific consulting experience of that speaker with an equal portion of information about the Association. Times and places have not yet been arranged. The talk, "Consulting as a Second Career" will offer suggestions on how to prepare to be a consultant with specific ways to prepare for the change. The speaker will give a brief but direct picture of what is involved in doing independent consulting and how ACC&CE will assist.

Members of the association will have a chance to make such presentations in their own geographic areas with help from members of Council who, themselves, will be making some of the presentations. In addition, all members will be involved in identifying potential groups that should be interested in such an informational program.

Peter Lantos, chairman of our effort to market the Association to prospective members, presented his version of such a talk at the February Council Meeting. It was well received by Council members.

The second target audience will be persons likely to need the services of technical consultants. This low-cost effort will be done with mailings and e-mailings that introduce ACC&CE and provide an easy way for the recipients to contact the office of the Association for a referral or more information. A database of names and addresses is already being constructed in such a way that the type of recipient will determine which type of message to send. All members of the association have received notice that their input of information of this database is urgently needed. With all of the groups, local and specialty divisions of various professional and trade associations our members belong to, it should be possible to get a wide audience for our message.

These bold moves are strongly supported by ACC&CE Council members. The involvement of

members from all locations will start to change the character of the association to one that has what all viable organizations need in these times: focus on results and participation in decision-making and local action by all members.

MEMBER CUTS CORROSION, Dr. John G. McCullough Member #805, tells a consultant's story worth reading.

My client was a chemical construction company which licenses a process for removal of acid gases from gas mixtures by absorption in a circulating aqueous solvent. The company is not usually interested in licensing, but it had bought the process in the hope that licensing customers would engage the firm to build their plants.

The solvent used in the process is corrosive, but it contains a passivating corrosion inhibitor, which reduces the corrosion rate of mild steel to zero. One plant, which licensed the process and had been built by my client, operated satisfactorily for several months, but then corrosion ran away. Iron levels in the solution rose and inhibitor levels fell.

The developer of the process, a chemical company which had sold the process to my client, prescribed changing the charcoal filter in the circulating solution as a cure for corrosion. In this case, the filter was changed frequently, and large sums were spent on charcoal, to no avail.

Finally, the unit was shut down and inspected. Part of the unit, where the solubility of ferrous salts was high, had been severely corroded, and the corrosion products had been precipitated in another part where iron was less soluble. The construction company, while well staffed with process engineers and metallurgists, had no chemist, and so engaged me as consulting chemist.

I explained that charcoal will remove hydrophobic contaminants, but cannot remove soluble, and especially ionic, corrosive components or corrosion products, and that money spent on filter media was wasted. Inspection of the unit and examination of its hydraulics revealed that the corroded part was not well wetted by the inhibited solution, and was therefore attacked by the acid gases.

The vulnerable part of the unit was clad with stainless steel. The corrosion products were removed by three acid washes. The unit was pretreated with inhibited solution, both cold and hot, before reintroduction of feed gas. An elaborate plan was laid for responding to alarming signals. The unit was then restarted, but no alarms rang. The unit ran at full production with high inhibitor levels and negligible iron levels for several months. The filter medium was not changed.

The unit was then shut down and inspected. The formerly vulnerable area was not attacked. No corrosion was found anywhere. The unit was again pretreated and restarted. The owner of the plant accepted the unit and paid the final installment of the construction fee to the client. The unit has since operated for seven years with no corrosion.

The cost to the client of these corrective actions was about \$1 million, and about 2% of this was the consultant's fee.

MEMBERS PUBLISH USEFUL REFERENCE BOOKS

George Drobny, Member Number 849, have made significant contributions to chemical technology by preparing new compilations of information for workers in polymers and coatings.

COATINGS TECHNOLOGY The Satas-Tracton book is a new edition of a standard book on coatings materials and technology. This has now been published by Marcel Dekker, Inc. The title is "Coatings Technology Handbook, Second Edition." This encyclopedic reference is an all-in-one guide to the field of coatings technology and covers a diverse range of topics, including basic concepts, coating types, materials, processes, testing, and applications. It summarizes both the latest developments and standard coating methods.

The handbook takes advantage of the insights and experience of over 100 recognized experts in more than 100 chapters to allow selection and application of the best coatings for specific product needs and represents an interdisciplinary exchange of ideas and approaches. In it are reviews of the most recent testing methods, including infrared spectroscopy, thermal analysis, weathering, and cure monitoring. There is extensive detail on a variety of contemporary processes such as flexography, electroless plating, flame surface treatment, embossing, and calendering. It analyzes current materials and surface coatings from resins and thermoplastic elastomers to peelable medical, radiation-cured, leather, and metal coatings.

The book is illustrated with more than 350 drawings and photographs, plus nearly 1,400 literature references, equations, and tables and is a useful volume for materials scientists and engineers; ceramic, mechanical, chemical, plastics, corrosion, and surface engineers; corrosion and surface scientists; and upper-level undergraduate and graduate students in these disciplines. Arthur is your reference expert on coatings.

FLUROPOLYMERS The other book is the work of George Drobny, head of Drobny Polymer Associates, who has already made contributions to the polymer field with translations into English of European polymer textbooks, and has produced patents and other publications. He now has authored "The Technology of Fluoropolymers," published by CRC Press of Boca Raton, Florida. It covers the chemistry, properties, processing, applications, effects of heat, radiation and environment as well as new developments and recycling of fluropolymers.

It contains basic scientific information, yet is primarily geared toward practical processes and applications. Particular attention is given to the structure-property relationships in order to help understand the behavior in processing and service. With a practical, well-organized approach, it provides an accessible introduction to fluoropolymers for those just entering the field, and a solid reference for those already working in the industry.

Those needing help on fluoropolymers or translations from German, Czech or Slovak certainly should contact George.

Here is another example of the depth and breadth of knowledge and experience to be found among the membership of the Association of Chemists and Chemical Engineers. Check Art Tracton and others out in the Directory Section of the ACC&CE site www.chemconsult.org.

INTERNET SITES OF INTEREST

EXPERTFIND

Here is a web site Ernie Coleman suggested. "It costs a bit, but it could serve as a model for us to consider." The site tells us: "ExpertFind.com is an innovative directory focusing only on Professionals such as yourself. The purpose of this directory is to bring together experts and those seeking their services. By virtue of your credentials we are pleased to offer you the opportunity to become a member. We are currently taking online applications at <http://www.expertfind.com>

ICPLANT

This site offers many useful consulting tips and contract-employment articles to help you with your consulting career, along with a place to make and post your Professional Profile and make it available in "Webified" form. This version of your resume presents your professional information with optimal impact to hiring managers. They make the process very thorough and detailed so that you don't forget to include all the information that hiring managers would like to see in a Professional Profile. Post your Professional Profile now and let this newsletter, The Chemical Consultant, know if it leads to any inquiries.

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BIGFOOT

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