

The Chemical Consultant

Association of Consulting Chemists and Chemical Engineers, Inc.

Scientific, Engineering, Business & Management Consultants
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FUTURE MEETINGS

JAN 27

Snuffy's Restaurant Scotch Plains, NJ Dr. Alfred U. Mac Rae Man in Space—Next Stop Mars

FEB 24

Snuffy's Restaurant Dr. Peter Lederman TBA

MAR 24

Snuffy's Restaurant Dr. John Bullock, N.J. Medical School EUXIA: Is It A Realistic Goal for Life?

APR 28—*TBA*

ABOUT THE ASSOCIATION

The Association of Consulting Chemists & Chemical Engineers (ACC&CE) is a network of senior-level consultants with a broad range of functional expertise and many years of experience in the chemical and allied industries.

The purposes of the organization are:

- To furnish support to its members as they conduct their consulting practices.
- To offer prospective clients a "clearing house" which they can use to find the most qualified consultants or team of consultants whatever their particular problem may be.

This newsletter is intended to support those purposes as well as to educate prospective new members and prospective client organizations about ACC&CE, and how we can be most helpful to them.

The ACC&CE has an interactive website – www.chemconsult.org, that allows prospective clients either to input their problem or to search for those consultants most skilled in their area of concern.

IN THIS ISSUE

In this issue, instead of the usual President's Letter, we've inserted the notes of John Bonacci's address to our annual meeting in NYC. Also, we have continued our practice of presenting articles by our members describing some of their experiences as consultants, with a letter and attached article from Dr. David Manuta. Your editor has contributed another piece on the dynamic crude oil/energy situation, and our first "Op Ed" piece by Bill Hoffmann has responded to that piece. We both believe that the issues of energy security, alternative fuels and feedstocks, climate change, etc. need much more thoughtful input from scientists and engineers rather than politicians, so we encourage you to jump into this arena with us.

In our recent annual meeting discussions, the thought came up that as an association and as individuals we should seek to make more use of what the internet has to offer in the area of marketing, and we are seeking advice and assistance of our readers who may be ahead of us in this endeavor. Finally, we have included information on the next few speakers at our dinner meetings in New Jersey.

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Message from the President

This is the text of a presentation made by President John C. Bonacci on the occasion of the 2008 Annual Meeting of the Association in New York City in October, 2008.

The State of the Association in 2008

The year 2008 passed quickly. We have maintained ourselves as a viable organization of dedicated professionals. We do, however want quite a bit more for our group. For the coming year 2009, I along with Richard Goodman and the rest of the officers and Board want to be sure we follow every Board meeting with a dinner and a speaker. Most of our solo meetings have 10 to 15 attendees except the joint meetings but they have been well received and the speakers continually find a receptive and participative audience. Please try to join us on the fourth Tuesday of every month at Snuffy's in Scotch Plains, NJ.

We did have four dinner meetings with speakers in 2008 and three additional Board meetings

The Newsletter, in my view continues to be our second most important activity and the third one for 2008 will issue shortly. Dr. Porcelli does a fantastic job on this and simply needs more input from the members for content. The addition of short columns and commentary has received a favorable response. My suggestion for others to take advantage of is as follows. When you read an interesting article in one of your trade or professional magazines write a brief 500 to 1000 word viewpoint under your by line. This can be read by our circulation list, viewed on the website and referred to yourclients. It is an outlet for your professional knowledge and could result in client assignments. Take advantage of this opportunity. I have done it twice myself.

So, as a further introduction we have:

Maintained ourselves Continued joint meetings with AICHE and Polymers Group Continued dinner meetings with speakers Published the newsletter Maintained our website.

We continue to seek speakers, seek papers and articles and stay solvent financially at close to breakeven.

I am not going to belabor the membership count as we often do. I am optimistic as to "believing that we are what we are". We have become a small group of 59 members and 6 affiliates and we are talented scientists and engineers who have something to offer both our clients, our profession and society at large. We can do it too. We stay functional through the meetings, the Newsletter, the website and our officers and directors meetings. As long as we have this base (i.e. kernel) we are beneficial to others and ourselves.

Thus we must continue because we do benefit or we wouldn't continue to be.

(Continued on next page)

Message from the President — Continued

<u>Now lets look briefly to 2009</u>. In this era of sound bites, I simply feel the best word is "IMPACT". To make an impact we must do more than sustain ourselves. We have to reach out as the professionals and knowledgeable people that we are. We can do this by enhanced communications. That's right another key word, "COMMUNICATIONS".

How do we do this?

First, the newsletter has to be used by us all, submitting letter/articles and ads.

Second, we need to promote the website by using it and forwarding the address to others.

Third, we need to take speaking engagements and represent ourselves as members of ACC&CE as well as our usual way.

Fourth, we should add ACC&CE to our business cards.

I want to talk a bit more about some of the above but answer the question- WHY.

Why communicate to make an impact? Because it is the age we live in. We cannot hide our light under a bushel basket. So here are a few ideas and then I'll mention one that came up during my presentation at the Annual Meeting on October 28, 2008 in NYC.

- 1. For speaking, *go to the schools*. Juniors and seniors in High School would be a good place but younger will help also. They have parents, you know. Go to the colleges, both 2-year and 4-year. They have science clubs and guidance counselors who need help.
- 2. TV- I mention a political experience I have had in the past two years as an elected Councilman in Berkeley Heights, NJ. Because I was running as an Independent against both political parties, I was asked to be interviewed for a 30 minute show and invited back again this year. We may be doing a series on more general public interest topics soon and I will try society topics somewhat off the main political track. I suggest you contact those local public access channels in every town and see what their needs are. They seek content.

At the meeting Dr. Porcelli suggested some broader use of the Internet. I will leave that to him to address in a Newsletter article as a stand-alone suggestion.

Well that's it. I look forward to 2009 and all the help members and officers can provide. Remember, we are both relevant and important. More clients and new members are bound to join us because if you think it is important to be a member of the Association of Consulting Chemists and Chemical Engineers, others will follow your lead.

Sincerely, John C. Bonacci

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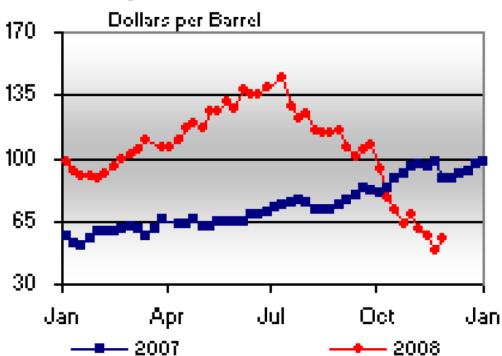
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Crude Oil Prices—the Continuing Saga

By Joe Porcelli

In preparing this newsletter I re-read my item "Peak Oil – a Red Herring masking the Real Problems We Face as a Nation", which appeared in the previous issue which was published in September. At that time, I described the impact of \$150/barrel oil on the world economy, and expressed concern that the new "good habits" might be reversible if or when the oil price were to collapse. Well, here we are in December and crude oil is trading about \$40/barrel. OPEC is struggling to reduce production to bring supply and the new lower demand into some semblance of balance, in order to stop the downward spiral in prices. But the changes, made much more drastic by the credit disaster, have been so rapid that no one knows what the new steady-state demand for crude oil will be. It is helpful to take a look at the graph just below which can be downloaded weekly from the government website www.eia.doe.gov. It can be seen that crude oil at the beginning of 2007 was trading in the range of \$50-60/barrel, with a modest upward slope versus time. The rate of price increases began to accelerate during the second half of the year, but a very rapid acceleration began in early 2008. The price peaked in about July of 2008, and has been dropping more rapidly than it had risen through the beginning of December. The last data point shows a blip upwards, but in the week since this graph was published, crude prices have fallen further to about \$40/barrel.

Spot Crude VTI Prices



I did not have a plot handy of the price of gasoline versus time, but the prices tended to trail the price of crude oil going up and going down.

(Continued on next page)

Crude Oil Prices—the Continuing Saga (Continued)

As mentioned in the previous article, demand is short-term inelastic, and it is likely that driving habits, purchases of more fuel-efficient vehicles, reducing leisure driving, etc. had started in 2007 and this trend accelerated through the first half of 2008. However, the increasing slope of the price curve gave no indication that this was occurring, presumably due to speculation that the price would continue to go up indefinitely. Thus the demand was very much out of balance with supply before the impact of demand collapse began to be reflected in prices.

Now we are in the opposite situation. We really don't know what the "permanent" change in energy consumption is—but forces are in place to cause the supply and demand to re-balance, but only momentarily, since as soon as demand exceeds supply again, or approaches that point, we will see another run up in crude oil prices. The forces include the auto industry desperately trying to sell their large inventory of gas-guzzling SUVs—my fear is that they will succeed as people quickly forget the last year and believe that \$40/barrel or less will be a long-term price level. Also, we are reading about some of the alternative energy developments running into difficulties justifying continuation of development work, and ability to obtain financing for implementation of new projects.

My opinion is that expecting the market to settle at a stable price is not realistic given short-term inelasticity, effect of speculation, the willingness of the energy companies to purchase crude oil at any price thinking they can pass on the cost to consumers, etc. I have not addressed at all the strategic issues of national security that are impacted by this out-of-control pricing mechanism.

I would propose a variable tax on crude oil, that would put a floor on crude oil prices at a level that would justify continued development and implementation of alternative domestic energy supplies (not just "drill, baby drill", by the way). This price should also be high enough to effect a permanent change in driving habits. This would also put a floor on the price at which oil producers can sell their oil, but they would also be better served by a more predictable long-term price structure, rather than the feast-orfamine which they are also experiencing.

I'm sure there are other viewpoints out there—please submit them to us and we will air them!

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Experiences of our Member Consultants

We received a letter from David M. Manuta, Certificate #882, along with two articles written about his activities. We have held one article over for our next issue.

October 6, 2008

Good Afternoon Ms. Townsend,

I wanted to share with you the unsolicited article on my firm that was recently published in the Jackson County (OH) *Times-Journal*. The attached newspaper article reprint (JacksonTimes-Journal091208.doc) and the link below summarize some work that my firm has started to do in economic development for the Southeast Ohio region. In light of everything else that is going on (for a change) there seems to be some good business news to report.

In addition, I recently wrapped up an investigation (collaborated with an MD Board Certified in Occupational Medicine) in support of a woman whose husband has worked at the nearby nuclear plant. The husband had passed away and the widow kept on getting "NO" for an answer from the agencies tasked with providing survivor benefits. The attached article (chillgaz081208.doc) was published in the Chillicothe (OH) *Gazette* earlier this year. The net result of my firm's intervention is that the widow received a check for \$125,000.00! *n.b. This article will appear in Vol. 21, No. 1 in about April 2009.*

For those of us who consult for a living, this is an example of the importance of "doing good." When we apply our knowledge to help others, the situation can be truly win-win!

Sincerely,

David M. Manuta, Ph.D., FAIC President, Manuta Chemical Consulting, Inc.

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Experiences of our Member Consultants

Commissioners meet with Dr. Manuta about consulting services

By LISA TACKETT Times-Journal Writer

Published: Friday, September 12, 2008 6:02 PM EDT

The Jackson County Commissioners have met with Dr. David Manuta of Manuta Chemical Consulting, Inc. to discuss retaining his services for the county. Dr. Manuta, President, is known simply as a "Jack of all Trades," who specializes in fire investigations and litigation support, but has a long list of other accomplishments to his credit.

His company is a government certified dealer/distributor that has customers throughout domestic and international markets. They also offer objective communication of information to clients or customers. Located in Waverly, the company offers more than 25 years of academic, consulting, and industrial experience, as well as litigation support, including scientific expert witnessing.

Manuta taught general physics at a local community college, won a significant teaching award at State University of New York at Binghamton, and was selected as a Science Fair Judge by the Ohio Academy of Science. He has received numerous honors and awards, has supervised, developed or collaborated to identify chemical testing, and has served as an investigator for various civil and criminal cases.

As a consultant, he has provided scientific support to small businesses seeking federal government contracts, has mediated or resolved disputes in private businesses, introduced patents for trans fat substitute for use in baked goods and snack foods, and developed methodology to clean and disinfect gas masks for use by the general public.

Manuta has written or co-written numerous publications, has several professional affiliations and is involved in the community. Add to his list the ability to write grants, and Manuta truly appears to know a little about everything. The commissioners indicated he would be a big help to the newly formed Port Authority, as he has connections in so many areas.

After a brief discussion about what services the county might need from him, Commissioner Rick McNelly suggested Manuta put a written plan together to present to them in a future meeting, along with his fees if hired on. McNelly also suggested Manuta contact Jackson County Prosecutor Jonathan Blanton to introduce himself, as he could be of service to Blanton in the future. At this time Manuta is not under contract with the county, but if the commissioners have their way, and the details can be worked out, he will be in the near future.

ftackett@timesjournal.com

FUTURE PRESENTATIONS

Dinner Meeting on Tuesday, January 27, 2009 Snuffy's Restaurant, Park & Mountain Ave, Scotch Plains, NJ

Title: "Man in Space - Next Stop, Mars"

Speaker: Dr. Alfred U. Mac Rae

Space is often referred to as the last frontier for exploration. It is an intriguing place in our environment and the challenges of putting man in space has inspired the imagination of scientists and writers for many generations. The emphasis of this talk is to provide a historical view of the technology used to venture into space, practical applications of space technology and to describe some of the issues that need to be addressed before putting a man on Mars. We will conclude the talk with an open discussion with audience participation on the subject of "Should we go to Mars and what benefits do we expect to gain from such a venture?"

Upon obtaining his PhD in Physics from Syracuse University, Dr. Alfred U. Mac Rae joined Bell Labs in Murray Hill, NJ where he did basic research on solid state and surface physics in the Fundamental Physics organization. He then switched to the management of the development of advanced integrated circuit fabrication technology and circuit design and finished up his career in Bell Labs managing the design and introduction into manufacturing of large communications transmission systems, retiring as Director of Satellite Communications. Since then, he has served as an international consultant in cellular and space technology.

He has received many awards covering integrated circuit technology and space. He is an elected member of the National Academy of Engineering, a Fellow of the American Physical Society and a Fellow of the Institute of Electrical and Electronic Engineers. He has 18 patents, with one singled out by the CEO of AT&T for its significant contribution to the earnings of that company.

Time: 6 p.m. Networking/Cash Bar, 6:30 p.m. Dinner, 7:30 p.m. Presentation

Registration: \$35 ACC&CE Members, \$45 Non-members

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Please visit www.chemconsult.org for more details.

Dinner Meeting on Tuesday, February 24, 2009
Snuffy's Restaurant, Park & Mountain Ave, Scotch Plains, NJ

Title: To Be Announced Speaker: Dr. Peter Lederman

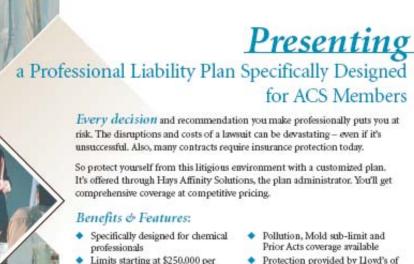
Dinner Meeting on Tuesday, March 24, 2009 Snuffy's Restaurant, Park & Mountain Ave, Scotch Plains, NJ

Title: EUXIA: Is It A Realistic Goal For Life?

Speaker: Dr. John Bullock, Adjunct Professor of Pharmacology and Physiology, N.J. Medical

School

Euxia, as defined by Hippocrates and Aristotle, implies an ideal or "best" level of health and physical condition. If medicine would concentrate more on optimizing the health strategy of patients instead of ignoring them until dysfunction appears, then man's total quality of life would be enhanced.



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Op-Ed-"Right Now, Access"

By Bill Hoffman

In the course of helping the editing of this newsletter, Bill Hoffman was energized by the earlier piece on crude oil prices, and he quickly submitted the following alternative view.

As I see it, the problem of oil availability and pricing cannot be dealt with piecemeal. For example, if power plants were completely nuclear, oil and gas demand would fall substantially, and not require a redevelopment effort to make shale oil practical or tar sand economical. A floor-price for oil is a tax and the government has never been an efficient user of taxes, often finding many other opportunities to spend when the windfall is sitting in front of the legislature.

We have come a long way the wrong way in allowing government and NGOs with legal standing to block development thus creating difficulties, and then counting on government to fix the difficulties it has caused. We have allowed ourselves as humans to be described as morally equivalent to rare species, so that the demand for additional energy is barred by concerns for, in many cases, animals just discovered by the process of initiating a project, with the animals' rights totted up and found superior. We find ourselves in the odd position of reducing sulfur levels in diesel fuel on the basis of some statistical evidence of deaths/100,000, when the unintended consequence is a price that means there will be some deaths/100,000 for unheated homes. Or a government subsidy with money it does not have.

On the narrow issue of what to do about oil and gas now, I think the direct answer is to permit access to any source within our boundaries and control. It is clear that there is a world market and that the supplies of this raw material is fungible, but it is also true that transportation of the raw material is a factor and a pipeline from Alaska or from an off-shore platform is more economical than global shipping.

Since the impetus is to create access to resources and not to enable any particular company to enrich itself, guidelines for ownership and development should be revised so that competitors can arise. This is completely within the expectation and the best experience of American innovation, but while many have noted the rarity of new refineries, the rarity of new oil companies is also worth noting. Is it possible that Standard Oil never really was dismantled? In keeping with the desire for competition, the "use it or lose it" rule makes perfect sense to me, such that oil leases that are not developed in some reasonable time are re-auctioned, with the current leaseholder excluded from bidding.

I have no faith in the ability of single individuals, "czars", to control the economy. The economy is what happens when people are free to trade with each other. The answer to energy supply is to allow the development of all our resources to proceed with a balance of concerns that places tangible, concrete human interests (power, jobs, income, safety, security) well ahead of special interests rhetorically cloaking their anti-industrial agenda as a moral imperative.

Neither the floor pricing nor the increased access ideas will affect fuel costs this week or next, but in my view, increased access and a new self-respect of humans as humans is the best course for the long run. In my dreams, fusion power runs all but transportation, which is run on hydrogen cracked from water by the fusion plants. Until that day...we need access.

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HOW CAN WE BETTER USE THE INTERNET TO PROMOTE OUR CONSULTING BUSINESSES?

By Joe Porcelli

A number of years ago, ACC&CE re-did their website to make it more visible to the world, by making all pages of the site searchable by the various search engines. This had the benefit of making it easier for prospective clients (and "window shoppers") to find consultants having their targeted capabilities.

This benefit also had a "dark side" - it allowed consultants to be contacted and perhaps hired without the association (and sometimes the consultant) knowing that he/she had been found thanks to being an ACC&CE member. For our long-term members, there was a noticeable downward trend in CHIs (Clearing House Inquiries). Fewer CHIs discouraged membership, but it was and still is not clear how much was by-passing the system and how much was a real loss in interest in our services. I believe both factors are responsible.

The problem with a website as your primary marketing tool, is that it is passive—marketing only occurs if a potential client looks for and comes to the site. We use this Newsletter, which reaches many past and potential future clients, as a way of suggesting that visiting our website would be worthwhile.

I can see two other approaches that could have merit, but I am not enough of a "techie" to know how to implement them nor how they would work.

First, is to use the Association website and/;or our individual websites (for those of us who have them) as a "launching pad" for transmittals to prospective clients. This requires of course the email addresses of potential clients, but in addition it requires being able to frequently develop new messages to be transmitted in some fashion. I'd be interested in learning from our readers whether they have tried this approach.,

The second approach is for the Association or individual members to create a blog. Here I am on very shaky ground since I know nothing about them, other than they serve as sites for dialogue. It would seem an interesting avenue to try. Here, I'd like to know whether such a concept is useful and if so how to do it.

PLEASE REPLY WITH YOUR THOUGHTS

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