From: Silver Circle
To: Cheryl Brown
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Newsletter for Senior Chemists

June 2013

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George Heinze **Dear All:**

The inaugural meeting of the Senior Chemists Committee (SCC) was held in New Orleans at the Spring 2013 ACS National Meeting. All members were in attendance, either in person or by teleconference. We were an interesting mix of new members and former members of the Senior Chemists Task Force.

Our first objective was to organize so as to serve effectively the two constituencies that both we and the Committee on Committees (ConC) had identified: (1) seniors who are still active in various occupations or who still wish to contribute to the goals and programs of the ACS; and (2) younger members and students who have questions about a chemistry-centered career or are looking for insight in advancing their present careers.

We had a very full agenda! We received many suggestions from a number of individuals and groups in the ACS after the announcement of the formation of the SCC. One of our objectives was to winnow through all of them and prioritize those most aligned with our mission. As part of this effort, there were presentations by the ACS President Marinda Wu on Vision 2025 and a follow-up by Connie Murphy seeking SCC participation in an Advocacy and Training Workshop in Indianapolis.

SCC also successfully supplied volunteers for the Undergraduate Speed Networking session in collaboration with the Society Committee on Education (SOCED) and Corporation Associates (CA) held on Monday afternoon in New Orleans. SCC will participate again in Indianapolis. There was also a presentation on the Science Coaches program.

SCC held another of its celebrated breakfasts on Tuesday morning, featuring Professor Steve Murawski, a renowned expert on marine ecosystems and natural resource conservation. He spoke about the Gulf of Mexico oil spill and the effect of chemical dispersants on marine life and edible seafood. Once again we had a "sold-out" audience.

SCC member, Lynn Hartshorn, staffs the Senior Chemists booth at the 2013 Great Lakes Regional Meeting in LaCrosse, WI.

In closing, I want to personally thank all those people, too numerous to individually enumerate, who were instrumental in establishing the SCC. Their dedication and persistence over many years was finally rewarded by this initial meeting. Now it is up to all the present members of the committee to fulfill their hopes and expectations.

George E. Heinze, Chair
Senior Chemists Committee

A Message From the ACS President

Courtesy of Peter Cutts

Friends and Colleagues, let me begin by congratulating you on your inaugural meeting for the Senior Chemists Committee at the national ACS meeting in New Orleans this spring! It must feel wonderful to finally have your own ACS Committee. I cannot think of a more dedicated and loyal group of ACS members with as many years of collective wisdom, valuable experience, and insights than yours! Ever since Eli Pearce came to talk with the ACS Board several years ago regarding a Senior Chemists Committee, I have been hoping this idea would become a reality—giving it as much support as I could along the way.

Supporting Senior Chemists to accomplish good things for the Society will be a benefit and great opportunity for all! You were one of just two groups that I made special efforts to personally visit in spite

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of a very busy schedule in New Orleans. Connie Murphy, Chair of the Committee of Chemistry and Public Affairs, and I are convinced that the Senior Chemists would be a good group to motivate and help ACS with advocacy efforts to improve the business climate to help with the jobs climate for our profession.

You could be a very effective spokesperson for ACS! Individual members can visit their local representatives for Congress to speak on support of various ACS policy statements such as *Foster Innovation* or the *U.S. Business Climate*. Please visit www.acs.org/policy for more details. I hope you will take the opportunity to learn more about the advocacy tools and training resources available at the next ACS meeting in Indianapolis. Thanks for your many years of dedicated service to ACS, and best wishes with your future endeavors!

Marinda Li Wu
2013 ACS President

Help a Dream Come True

ACS is pleased to have selected a new class of undergraduate scholarship recipients. Your pledge of $2,500 will allow one more talented, underrepresented minority student to pursue a degree in the chemical sciences. Watch the ACS Scholars video featuring program participants, donors, and mentors to see how this unique program is changing the lives of promising scientists.

SCC Activities at Spring ACS National Meeting in New Orleans


Courtesy of Linda Wang

Assessing the Impact and Consequences of the Deepwater Horizon Oil Spill on Gulf of Mexico Ecosystems: The Critical Importance of Environmental Chemistry

A summary of Dr. Steve Murawski's talk at the Senior Chemists Breakfast in New Orleans.

Dr. Steve Murawski, a key figure in understanding and responding to the Deepwater Horizon oil spill in the Gulf of Mexico, was the speaker at the Senior Chemists Breakfast in New Orleans. Formerly the director of scientific programs and chief science advisor for the National Oceanic and Atmospheric Administrations National Marine Fisheries service, he is currently a research professor at the University of South Florida's College of Marine Science.

Dr. Murawski discussed the causes of the Deepwater Horizon Oil Spill of April 20, 2010 that released about 210 million gallons of oil; the ongoing work to find out where the oil has gone; and how to remove the remaining oil. He explained that the oil consisted of many fractions with different boiling points and that the different fractions are found in different regions. About 1.8 million gallons of surfactants were used as dispersants. The location of the oil, and whether it floats or sinks, depends on particle size. He pointed out that oil-munching bacteria increased notably after the oil spill, and that these bacteria digested a large amount of the oil. Much, however, remains, with a substantial amount of oil and surfactant residing in bottom sediments.

Dr. Murawski also referred to a great deal of research carried out into the safety of seafood and fish taken from unrestricted areas of the Gulf for commercial sale. No toxic concentrations of polyaromatic hydrocarbons were found in the hundreds of samples of seafood and fish tested.

BP is currently providing one billion dollars for early restoration projects such as restoring beach bird nesting and turtle nesting habitat. Proposals for other restoration projects are being accepted.

Tom Beattie
Lynn Hartshorn
Senior Chemists Committee

Eli Lilly CEO To Address Senior Chemists in Indianapolis

In conjunction with the ACS National Meeting in Indianapolis, IN, and a meeting theme of "Chemistry in Motion", one person readily comes to mind as a keynote speaker for the Senior Chemists Breakfast. He is John C. Lechleiter, Ph.D., who rose through the ranks at Eli Lilly & Co., Inc. from a synthetic organic chemist position to become Chairman and Chief Executive Officer. Having experienced enormous change in the pharmaceutical industry, Dr. Lechleiter will address those changes and what Lilly is doing to create, manage and respond to change.

The event is on Tuesday, September 10, 2013, 7:30 a.m., at the J. W. Marriott Hotel. Ticket price is $15.00 and can be purchased through meeting registration. A limited amount of tickets will be available at the door.

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SCC Participates in Speed-Networking with Undergraduates

At the April ACS National Meeting in New Orleans, more than half of the members of the Senior Chemists Committee (SCC) participated in a newly created event. Organized with the ACS Office of Undergraduate Education and Corporation Associates, SCC volunteers met groups of two or three undergrads for a quick (~7 minutes each time!) dialog and exchange of ideas. Over 150 undergraduate students shuttled among tables at which 57 chemistry professionals shared career information and experiences.

As part of our SCC mentoring responsibilities toward younger ACS members, the speed-networking format was devised to try to meet and engage the younger chemists on terms familiar to them. Judging from comments made after the meeting, they loved it. Perhaps surprisingly (but not to me as I had done it before at an ACS Regional Meeting), so too did the senior chemists*.

At a first time event, student attendees represented a small fraction of the >5000 student member attendees at the meeting, so there is plenty of opportunity for the event to grow.

Already we are discussing doing it again at the fall Indianapolis National Meeting, although student member attendance tends to be smaller in fall than at spring meetings. If the idea seems appealing to you, we welcome your participation in Indianapolis or at future ACS Meetings. Just let me know of your interest and we can add your name to our list.

Tom Beattie, Vice Chair
Senior Chemists Committee

Undergraduate Speed Networking Event – An Evaluation*

One of the first events organized by the new Senior Chemists Committee was “Undergraduate Speed Networking with Chemistry Professionals”, which took place at the ACS National Meeting in New Orleans. For this event, about fifty 30-inch round tables were set up in the New Orleans Convention Center with a senior chemist professional at each table. Some 150 undergraduate chemistry majors were invited to visit with a senior chemist for about six minutes to ask questions and “to partake of senior chemist wisdom”. Each undergraduate had the opportunity of visiting with about twenty of the senior chemists during the course of the event.

I was one of the professionals. I pointed out to the undergraduates that within my experience a situation very comparable to today’s job market occurred when I decided to semi-retire from my Northwestern University Department of Chemistry position in the late 90’s. I wanted to continue to use my expertise. The questions I asked myself and the questions I suggested the undergrads ask are: “What do you like to do most?”; “What do you really know?”, and “What are you good at?” The answers to these questions led me to develop a short course on Laboratory Management to present at ACS and at ALMA (Association of Laboratory Managers; http://labmanagers.org/) Conferences. Since then I have presented the short course more than 40 times in more than 20 countries.

It turns out that all but one of the undergrads (they were sophomores and seniors) whom I visited with had never actually had a job. They expressed only a desire “to get a job”. There seemed to be no consideration for perhaps starting something new—essentially a lack of entrepreneurial spirit. In response, I was pleased to point out and explain to these students some different approaches to starting a career.

I feel that with activities like these the Senior Chemists Committee is off to a very meaningful start.

Claude Lucchesi
Senior Chemists Committee

Recordings from the 2013 New Orleans National Meeting!

More than 200 poster and 400 oral presentations that were recorded in New Orleans are now available at www.presentations.acs.org. In addition to the new content from New Orleans, over 1,000 posters and presentations from the 2012 Philadelphia and San Diego national meetings are also available. ACS Presentations on Demand features a dynamic viewing platform, a searchable abstract index, and is compatible with mobile devices so you can view presentations anytime, anywhere. The presentations feature PowerPoint slides synched with audio, allowing you to jump directly to slides of particular interest. Have a look at ACS Presentations on Demand today!

Career Changes

Sometimes career changes happen by choice, and sometimes not. For example an unexpected loss of a job can be devastating. However, even this can lead someone in a new direction which ultimately turns out very well. The following two articles give examples of career changes that happened for various reasons.

On a Race Track Professionally And How I Won!

Pearce My career has been—and continues to be—pleasantly varied and more successful than I ever expected. Networking thru ACS was a significant contributor to my success as a ‘chemist’.

I was born in Brooklyn, NY in the depression [1929]. Both my parents were immigrants from Russia and minimally educated—but they expected me to go to college. At Boys High School, I had a terrific chemistry teacher. This lead me to major in chemistry at Brooklyn College (B.S., 1949, tuition free). I started work at NYU Bellevue Medical Center as a chemist, studying colchicine metabolism in gout. As an employee, I got free tuition at NYU where I received an M.S. in 1951. I continued evenings at Polytechnic Institute of Brooklyn towards the Ph.D. I was drafted in the Army during the Korean War [1953-55]. After basic training I did research on steroids after animal shock and coauthored five papers before being discharged.

I returned to Polytechnic with GI Bill support and a DuPont fellowship and received my PhD in 1958. My thesis [cationic and anionic polymerization] was mentored by 'Charlie' Overberger, a famous polymer chemist and former President and Board Chair of ACS. He remained my advisor all his life. Other mentors were Herman Mark, a father of polymer chemistry, and 'Ernie' Becker.

'Charlie' immediately got me appointed to the Poly Ed Committee (ACS Polymer Division) which I chaired later. Then ACS President 'Bill' Bailey appointed me to the Committee on Professional Training to see that polymer science was taught in undergraduate studies. In my days as Councilor, Board Member and President [2002] I have served on the International Activities Committee (IAC), Senior Chemists Committee (SCC), Committee on Committees (CONC), Society Committee on Education (SOCED), and chaired the Committee on Nominations & Elections (N&E) and the Committee on Science (COMSCI).

As ACS President, I proposed a Senior Chemists Committee and after eleven years this is now an official Board-Council Committee. I thank George Heinze for making this come to pass, and feel good that I preceded him as Chair of the Senior Chemists Task Force. You might say that I built a strong chemical network which helped my 'working' career.

My first post PhD job was with Carothers Research Lab (DuPont Experimental Station). I thought I knew polymer chemistry but was amazed at the polymer advances being made there. No doubt DuPont had the best polymer science lab in the world then. I became expert in polyamides, and property modifications by amorphous reinforcement, and Glass Transition Temperature(Tg) manipulation.

I decided to change companies to move up the management line. After five years, I joined JT Baker Chemical as a supervisor in their attempt to go into specialty polymers (high Tg methacrylates, epoxies, polyurethanes). Their parent company, Vick, never fully supported this venture. Then I was recruited by Allied-Signal Corporate Lab as Manager of Polymer Synthesis and subsequently joined the Vice-President of Research's staff. During the latter period, I wrote a requested honest report about morale in the Corporate Lab and was subsequently fired. This is when professional networking really helped; within three weeks I was fortunate to become Director of the Dreyfus Lab at the Research Triangle Institute. This was a great challenge that I enjoyed very much. However, my alma mater, Brooklyn Poly, convinced me to return 'home' as Professor of Chemistry and Chemical Engineering.

I have had a great academic career: Head of the Chemistry Department, Dean of Arts and Sciences, Director of Herman Mark Polymer Research Institute and University Professor. I published well over 250 reviewed papers and received several million dollars in research funding from the National Science Foundation, the National Aeronautics & Space Administration (NASA), the Army Research Office (ARO) and many companies. Also I have been a consultant for the North Atlantic Treaty Organization (NATO) projects, Du Pont, AMP, Colgate and others, as well as a legal consultant for a number of companies. I am a Fellow of the American Chemical Society (ACS), the American Association for the Advancement of Science (AAAS), Thermal Analysis Society, Society of Plastics Engineers (SPE), New York Academy of Science, and have received the Paul Flory Education Award, the Natta Medal of the Italian Chemical Society, and the Austrian Polymer Chemistry Award, etc.

I am fortunate to have had a career working with so many able students, post-docs, and colleagues. At age 84 I still have an office and lab —and am working with them to fund many of our research ideas. I am involved with nanochemistry, polymer blends to modify properties, and additive concepts to stabilize polymers in use. Science continues to be a fascinating challenge and keeps ones imagination growing throughout the years.

Eli M. Pearce, PhD
Past ACS President, 2002
University Research Professor
Polytechnic Institute of NYU

JFK Made Me Do It

I finished my PhD in Physical Chemistry at the University of New Hampshire in 1962. Then came a great job offer from DuPont, my former employer, at the Pioneering Research Lab at their Experimental Station in Wilmington, Delaware. I was in their Textile Fibers Department, often referred to as the "Money Maker".

It was a nice work environment with a lot of very bright scientists. There I met Stephanie Kwolek who would invent Kevlar.

The salary and fringe benefits were impressive. The Lavoisier Library was nearby on a campus-like setting. The glass shop and electronics lab were staffed by great people. The cafeteria was the former clubhouse of the DuPont Country Club and lunch was inexpensive.

A fellow employee was developing disposable diapers from a highly absorbent form of cellulose. They reached a point where samples needed to be tested. Our young son and daughter were enrolled in the program so we had free diapers to test.

The first year passed quickly and we were starting to consider buying a house. I was at work in the lab on a Friday afternoon. Suddenly news of an assassination attempt against our President in Dallas electrified our facility. Everyone gathered around a few radios on people's desks. There was complete silence by those present as we listened for each word from Dallas.

Soon the horrible news came – President Kennedy was dead! Those present silently headed to their cars in the parking lot. We drove home to watch events in Dallas on our TV sets, staring in disbelief as Vice President Lyndon Johnson was sworn in as President on the plane headed back to Washington.

It was a weekend like no other in my life. Lee Harvey Oswald was soon captured and taken to the police station where he was subsequently shot on camera by Jack Ruby. Then came the President's funeral in our nation's capitol, fully covered on TV. It was truly the week from hell!

Suddenly I began to wonder if my goal of making money for DuPont was important. Perhaps I should try to help educating the next generation. At age 29.5, I was having a midlife crisis.

A sudden academic job search followed. In late June I took a week's vacation and we drove to Wisconsin for two interviews. Both led to job offers and I accepted a position as Assistant Professor at the Wisconsin State College at Eau Claire.
It was a quantum leap of faith into the unknown. There was a large cut in salary and fringe benefits. We had to pay our own moving

expenses plus pay to terminate our rental lease. Then there was a new lease to sign in Eau Claire. People suggested that I was crazy and they had a point!

My return to DuPont was strange. Luckily my supervisor accepted my departure notice in a professional manner. We agreed to a departure date and a final research report deadline. He kindly offered to hire me back if things did not work out.

We spent 34 years in Eau Claire. The “State College” eventually became part of the University of Wisconsin System. I was able to help many students discover the joys of chemistry. Former students are on the faculty at Cal Tech, the University of California-Berkeley and the University of Wisconsin-Madison. Many have done well in the chemi¬cal industry. Some are now doctors and dentists. And President Kennedy made me do it!

Allen A. Denio
Senior Chemists Committee
Newark, Delaware

Retirement Activities

Most often retirement can lead to the exploration of new opportunities as described in the following two articles:

Retirement Can Be Great

Don Burns

Can one stay active in his field after retirement? This may seem like a nonsense question, but the answer is “yes.” Example: I’ve retired twice. The first time was from Technicon Instruments Corp in Tarrytown, NY, after 16 years (when the company’s R&D Division was acquired by Bran+Leube and moved to Europe) and I chose to take their conscience money and stop working.

After nine months of loafing, I got bored – had to get back into science. So, out went the resumes. The most interesting response came from Los Alamos National Lab and I decided to pursue it. They wanted an interview just before Christmas and I said “no; make it after New Years” and they suggested January. “Bring warm clothing and your boots or overshoes,” they said. Surely they must be kidding, I thought, since Los Alamos was south (from where I lived in New York State) and New Mexico was desert country. They weren’t kidding; I had to wipe half a foot of snow off my rental car.

The interview went OK, and I was invited to join LANL on Aug 1, 1989. I couldn’t, since I was chairing a technical session at an ACS meeting in Denver, CO, that week. So, I moved to New Mexico the next week, leaving my wife to show and (hopefully) sell our house in Putnam Valley, NY. She did, and joined me near the end of the year.

Assignments at LANL took advantage of my experience at Technicon: SFA (Segmented Flow Analysis) and NIR (Near-Infrared) spectroscopy. SFA was involved to automate a wet chemistry analysis of plutonium solutions, improving precision by an order of magnitude. And NIR was incorporated in the identification of contaminated plastics and rubber (i.e., radioactive) in a hot glovebox prior to permanent storage at the Waste Isolation Pilot Plant (WIPP). (But I never got to glow in the dark.)

For the previous 10-12 years, I had been on the American Chemical Society’s short course program giving a 2-day course on NIR. The program was offered almost annually at Pittcon and at the Federation of Analytical Chemistry & Spectroscopy Societies (FACSS) – sometimes with a guest speaker from the NIR field.

But things got better. The first major invitation came from Australia to give my course at the Council for NIR Spectroscopy (CNIRS) meeting in Lorne, Victoria. LANL said “OK” and that was the beginning of a series of invitations (read “mini-vacations”) in Spain, Italy, and Finland, as well as Canada and the US.

Then came retirement for real, after 6 ½ years of very enjoyable activities at LANL. Now things got even sweeter: I got on the ACS speaker program with a couple of talks (“Counterfeiters: Catch ‘em with Near-IR” and “70 Years of Fun with Chemistry”). This involved brief trips to various parts of the country, sometimes giving four lectures in a week to ACS local sections. This lasted a few years, and then ACS stopped supporting these trips. That ended it, but it was wonderful while it lasted.

So, retirement can be great, and sometimes it can be an extension of one’s field of interest.

Don Burns
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What does an editor and chemistry writer do after retirement?

A Passion for Writing about Chemistry

For me, writing has been and still is an addiction, albeit a pleasurable and intellectually rewarding one. This was especially the case during my 13 years at *Chemical & Engineering News*. I joined the magazine as Senior Editor, based in Basingstoke near London, in 1994. Before then I had written many articles and authored several books on chemistry and related subjects and also edited the International Union of Pure & Applied Chemistry’s news magazine *Chemistry International.*

My first piece in C&EN, a news story about the detection of organolead in vintage French wines, appeared in the July 11, 1994 issue of the magazine. Between then and my retirement from the magazine in March 2007, I reported on almost every conceivable topic in chemistry and related sciences. I wrote, for example, stories about acid rain, nuclear energy, vaccines, nanotechnology, femtosecond chemistry, ionic liquids, polymers, supramolecular chemistry, the history of science, and the status of science in countries such as China, Germany, and Russia. My final piece was a *What’s That Stuff*? column in the March 12, 2007 issue of the magazine titled: “Amber: Fossilized resin from trees is prized for its use in jewelry.”

Following retirement, I was determined not to become fossilized myself, so I decided to accept the position of Science Writer in Residence at Queen's University Belfast and Queen's University Ionic Liquid Laboratories. This part-time post continued for three years until 2010 during which time I wrote newsletters and press releases for the university. However, my main output was the book *An Introduction to Ionic Liquids* published by RSC Publishing in November 2009. [http://www.rsc.org/shop/books/2009/9781847551610.asp]

In July 2009, my wife Mary and I took a short break and visited the First World War battlefields and cemeteries in and around Ypres, Belgium. I soon discovered that although the war was sometimes called "the chemists' war," there was not one book that brought together all the different aspects of the chemistry of the war. I therefore decided to write such a book, not just for the many chemists who are interested in the war but also for the general reader. After more than three years work, including a couple of years of research into the topic, my book *Gas! GAS! Quick, boys! How Chemistry Changed the First World War* appeared. It was published in the U.K. by The History Press in September 2012.

The title is taken from British war poet Wilfred Owen's famous poem about chlorine gas poisoning. However, only one chapter is devoted to chemical warfare. Other chapters focus on the chemistry of shells and grenades, metals, khaki dyes, the care of the sick and wounded, and the use of antiseptics and disinfectants to fight the spread of infectious diseases. The book was launched in the U.S.A. in June 2013. [http://www.ipgbook.com/gas--gas--quick--boys--products-9780752466019.php?page_id=21]

Michael Freemantle
Science Writer
Basingstoke, U.K.

Interview

Another in our continuing series of interviews with famous senior chemists. A brief biography of a former president of the American Chemical Society and the American Association for the Advancement of Science, and a recipient of the ACS Priestley Medal.

An Interview with Dr. Mary Good

Mary Good

Dr Mary Good has had three careers, and has been successful in all of them. She obtained her Ph.D. in 1955 at the University of Arkansas, where she also met and married Bill Good, a graduate student in physics. She and her husband both worked on the faculty at Louisiana State University (LSU) first in Baton Rouge and from 1958 at a new LSU campus in New Orleans. She was appointed the Boyd Professor of Chemistry, the LSU System's highest honor, in 1976. In 1978 she returned to the main campus in Baton Rouge.

In 1980 she had her first career change, leaving the LSU faculty to join Universal Oil Products (UOP) as their Vice President for Research. Dr. Good stayed with UOP for eight years, and through various mergers and changes of name she spent another five years as Senior V.P. for Technology for Allied Signals. While she worked in academia and in industry, Dr Good continued to advocate the importance of science and technology for society. This was one of the reasons that a third career opened up to her.

While she was working in industry, she was asked by President Carter to serve on the National Science Board (NSB). She was reappointed in 1986 by President Reagan, and was the first woman to become chair of NSB. In 1991, President George H. W. Bush appointed her to his Council of Advisors on Science and Technology. These were all voluntary positions. In 1993 she was appointed as the Undersecretary for Technology in the U.S Department of Commerce by President Clinton. She served in that capacity for four years, and then returned to academia where she became the Donaghey Professor and Dean for the College of Engineering and Information Technology at the University of Arkansas at Little Rock. She held this position until 2011, and currently serves as Special Advisor to the Chancellor for Economic Development at the University of Arkansas at Little Rock.

During her various careers, Dr. Good has also served as President of the American Chemical Society (ACS) and of the American Association for the Advancement of Science (AAAS). She was elected to the National Academy of Engineering. She has received many honors and awards including the ACS Priestley Medal, the American Institute of Chemists' Gold medal, the Vannevar Bush Award from the NSB, the Garvin-Olin Medal, and the Glenn Seaborg Medal.

The Interview

When I talked to Dr. Good, I asked her which of the positions that she has occupied were most interesting to her, and she replied that they were all different but that she enjoyed all of them. She remarked that her most challenging career change was the shift from academia to industry, because at that time she knew very little about UOP, or how things worked in industry. Her job included managing about five hundred scientists for UOP, mostly chemists and chemical engineers. I asked her how she achieved this and she replied that she walked around a lot and got to know people and the work that they were doing.

The change to full-time government work as Undersecretary of the Department of Commerce meant that she had to become involved in politics, for example running political interference for the National Institute of Standards and Technology (NIST), which is a component of that Department. Dr. Good told me about a small committee that she was on for the period that she held this position, when GPS systems were beginning to be developed and sold. At that time the Department of Defense did not want U.S. companies to sell precise GPS measuring systems that located points closer than ten meters, but manufacturers outside the USA were selling such units. Hence U.S. companies were at a disadvantage. After six months of work the committee succeeded in developing a policy that enabled American companies to sell these precise GPS systems.

I asked Dr. Mary Good about her many honors and awards. She said that the three that she values especially are the Priestley Medal, the Vannevar Bush award from NSB given for outstanding service to activities in science, technology, and public policy, and her elected

membership in the National Academy of Engineering.

Her current position is part time and involves fund raising and planning for the University of Arkansas at Little Rock, for example working to get the legislation and funding necessary to create a technology park in Little Rock. When asked if she plans to retire, she said no because she enjoys what she is doing. When I asked her if she had any advice for senior chemists who are retired but would still like to be useful to the science community, she suggested that they use their knowledge and experience to become involved in various aspects of science education, for example by tutoring children.

Lynn G. Hartshorn
Senior Chemists Committee

Encouraging Senior Activities at the Local Level

What can you do in your local section?

ACS Science Coaches Program: Partners in Science Success

What is the ACS Science Coaches Program?
ACS Science Coaches are chemistry professionals who partner with a K – 12 teacher to share their expertise and enthusiasm for science while supporting science teaching and learning in a local school. Science Coaches volunteer to visit a school to assist one teacher at least six times throughout one school year and to communicate regularly via email or phone.

The ways in which Science Coaches partner with teachers vary significantly. Each chemist-teacher pair collaborates to leverage their combined expertise and interests. For example, Science Coaches have assisted their partner teacher in launching a chemistry club, planning and testing lessons and laboratories, providing hands-on assistance during laboratory experiments, presenting lessons, and mentoring small groups of students.

ACS provides a grant of $500 for the teacher to support science teaching and learning in the participating classroom. These funds are often used to purchase supplies for laboratory investigations, hands-on activities, and/or demonstrations usually related to work that the teacher and Science Coach have jointly planned and/or implemented. Sometimes they may be used for science needs for general classroom use. ACS also provides information about ACS Education Division resources.

How is the Partnership Initiated?
Participating chemists identify a school in which they would like to volunteer. A wide range of schools participate in the Science Coaches program – public, private, charter, urban, suburban, and rural. The school could be a school in which they know (or have known) a teacher or student. Most Science Coaches however select a school where they have little prior personal connection.

If the Science Coach has identified a teacher, initiating a conversation with that teacher is a great first step. If a teacher is not known, the Science Coach meets with the school's principal to share program details and to identify interested teachers.

The Science Coach then submits a proposal to ACS for the planned partnership. Proposals are evaluated to determine how well they align with the mission of the Science Coaches program.

Is the ACS Science Coaches Program for You?
Do you want to share your enthusiasm for chemistry with students? Are you interested in partnering with a K-12 teacher in your area to support science education in their classroom? Will your schedule accommodate at least six classroom visits and regular email communications with your partner teacher during an academic year? If so, consider participating in the ACS Science Coaches Program!

The ACS Science Coaches web site www.acs.org/sciencecoaches features a wealth of information such as important program dates, steps in the application process, best practices, and some Science Coach Success stories. For further questions, contact sciencecoaches@acs.org.

Terri Taylor, Assistant Director
K-12 Education
American Chemical Society

Mission Statement

The Senior Chemists Task Force was established in 2009 and is comprised of 21 members to function as the focal point for senior chemists over the age of 50 within the ACS and the chemistry enterprise at large. Their mission is:

1. To encourage and serve as a conduit for senior members to volunteer and contribute their energy and talent to the ACS, including governance, education, government affairs, mentoring, and community projects;
2. To provide useful service and information to seniors, such as retirement and estate planning, consulting and part-time opportunities, and travels/tours;
3. To foster networking opportunities among seniors, both nationally and locally;
4. To represent senior chemists in their interactions with other elements of ACS governance, bringing awareness of their needs, fostering, collaborations, and creating synergies.

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