

**Celebrating 50, 60 and 70 Years
of Membership in the
American Chemical Society**

**Alfio's La Trattorio Restaurant
Chevy Chase, Maryland**

December 14, 2019



Honorees – 50, 60, and 70+ Year CSW Members

Celebrating 50 Years:

Mr. Steven Daniel Brynes
Dr. Chia Ting Chen
Mr. Leung Cheng
Dr. Philip Ridley DeShong
Mr. Gregory A. Dus Sault
Ms. Sandra E. Erb
Dr. Thomas Joseph Flynn
Dr. Richard George Gann
Dr. Alan Randolph Goldhammer
Dr. Steven M. Hassur
Mr. Bruce Timothy Heitke
Mr. Leonard Charles Keifer
Dr. Abdallah M. Khasawinah
Dr. Michael J. Kurylo, III
Ms.. Bettijoyce Lide
Dr. Rachel Massuda
Mr. Russell John Mc Candliss
Dr. Jerome Joseph McDonald
Mr. David C. Roberts
Dr. Harold Edwin Seifried
Dr. Raymond Sutula
Dr. David A. Ucko
Dr. Robert John Wolters
Dr. S Miles Woods
Mr. Roy Shih Shyong Wu

Celebrating 60 Years:

Dr. Robert John Argauer
Dr. Charlie James Barnes
Mr. Stephen A. Brenner
Mr. Anthony F. Dorrzapf, Jr.
Dr. Igor John Eberstein
Mr. Robert E. Farncomb
Dr. Russell E. Farris
Dr. Leonard Friedman
Mr. William L. Friend
Mr. Herbert Kirschenbaum
Dr. Alan C. Levy
Mr. Paul Lieberman
Mr. Jan W. Mares
Mr. James V. Mengenhauser
Mr. Robert L. Myklebust
Mr. Michael E. Nolen
Dr. Donald G. Rea
Dr. Fred E. Saalfeld
Dr. Desmond Sheehan
Dr. T. F. Spande
Dr. George L. Steffens
Mr. Paul C. Susie
Dr. Warren E. Thompson
Dr. David G. Van Ormer
Dr. Denys J. Voaden
Mr. Robert A. Walde
Dr. Garnett E. Wood

Celebrating 70 Years:

Mr. John D. Buchanan
Dr. Edward F. Devlin
Mr. Walter Ervin Grant
Mr. Raymond Leo Hackert
Dr. Robert Remson Stromberg
Mrs. Rebecca C. Thies





SPEAKER

Lois Ann Beaver

FDA, Retired

"Chemists Work To Avert Opioid Tragedies"

Biography

After obtaining a BS in Chemistry and in Mathematics at Rosary Hill (now Daemen) College in Buffalo she began a multi-decade career with the U.S. Food and Drug Administration that included graduate studies in Chemistry and International Law at Georgetown University. Lois Ann Beaver continues to focus on separation science, and analytical chemistry in the biopharmaceutical area. While working in the FDA's Office of the Commissioner, she served on the FDA Pharmaceutical Quality Council that conceived and developed quality by design; led activity for FDA's joining the international Pharmaceutical Inspection Cooperation Scheme; worked as liaison with international organizations such as the European Commission, and WHO; managed the export program for unapproved pharmaceuticals, was associate director for international harmonization working on activities such as the International Conference on Harmonization...Pharmaceuticals (ICH); was US coordinator for Veterinary ICH; delegate to the APEC, (Asia Pacific Economic Cooperation) Life Sciences Innovation Forum. Lois also led international projects on anti-counterfeiting of medical products and good manufacturing practices in emerging countries and established a pharmaceutical information center in Cairo. In addition, along with a colleague, she founded an instrument company, managed it for 10 years and achieved 12 patents.

Currently Lois is an Emeritus Member of ACS and is a Board Member of the Washington Chromatography Discussion Group, the Potomac River Jazz Club, and the Maryland Federation of NARFE (National Active and Retired Federal Employees). Also, she is on the organizing Committees of PREP 2020, (Preparative Chromatography) and HPLC 2020, (International Symposium on High Performance Liquid Phase Separations and Related Techniques).

Abstract

For centuries individuals have developed or modified products intended for human consumption. In those instances when the main driving factor is to gain money rather than to improve the human condition negative results become apparent. This is the case of the current opioid tragedies occurring in the United States.

Background on opioid related matters with a focus on developer chemists and chemists who assist in solving problems will be provided. Included will be an update of efforts to address the issues with Fentanyl that pose a global threat.



Honorees Celebrating 50 Years

Dr. Thomas Joseph Flynn

Dr. Flynn received his B.S. in chemistry from the University of Pennsylvania in 1969 and his Ph.D. in biochemistry in 1977 from Temple University School of Medicine. After three years of post-doctoral research in developmental biology where he studied lipid metabolism in cultured pre-implantation mouse embryos, Dr. Flynn joined the FDA's Bureau of Foods in 1980. He remained there as a Senior Research Chemist and Team Leader for In Vitro Toxicology until his retirement in 2018. At the FDA, Dr. Flynn's career focused on the development of alternative (in vitro) assays for both identifying potential toxicants and for ascertaining information on the molecular mechanisms of action of toxicants. Dr. Flynn has worked with a variety of in vitro models including: cultured whole rodent embryos; cultured embryonic mouse neuronal and mesenchymal cells; cultured embryonic chicken neural, heart and liver cells; cultured primary rat liver slices and hepatocytes; cultured rat liver cell lines; cultured human liver and intestinal epithelial cell lines; and, cultured primary human hepatocytes. Throughout his research career, Dr. Flynn has published 47 peer reviewed research papers, 10 book chapters and review articles, and 85 technical abstracts. In 2017, Dr. Flynn was awarded the FDA Center for Food Safety and Applied Nutrition Legacy Award in recognition of his extensive mentorship of Fellows and younger scientists during his career with FDA. Membership and posts he has held in professional societies include: the American Chemical Society, Society of Toxicology (councilor, treasurer of local chapter), Teratology Society (program committee, nominations committee, membership committee, public affairs committee), Society for In Vitro Biology (public policy committee), and the Association of Government Toxicologists (councilor, president).

Dr. Steven M. Hassur

B.S., 1970, University of Illinois at Chicago Circle; Ph.D. (Organic Chemistry), 1976, University of Wisconsin at Madison; postdoctoral appointments at the Massachusetts Institute of Technology, and the Uniformed Services University of the Health Sciences, Bethesda, MD. Began civil service career in 1978 at the U.S. Environmental Protection Agency - Office of Pollution Prevention and Toxic Substances. Analyst and, later, Review Manager of new and existing chemicals under the Toxic Substances Control Act. Chaired the first international symposium on green chemistry (US EPA/ACS, Washington, DC, 21-25 August 1994). Managed Agency review of the first petitions to the Toxics Release Inventory (TRI) under the Pollution Prevention and Community Right-to-Know Act. Co-Project Leader for development of the TRI Risk-Screening Environmental Indicators - a risk-based evaluation tool used by the government, environmental organizations, the press, academicians, industry and the public. Retired from government service in 2004. Received Distinguished Scientist commendation and the Distinguished Career Award Gold Medal.





Honorees Celebrating 50 Years

Mr. Bruce Timothy Heitke

Bruce Heitke worked in Skokie, IL for G.D. Searle, an ethical pharmaceutical company, synthesizing organic intermediates in support of new drug discovery. He was a Peace Corps Volunteer in Costa Rica. He worked at Aberdeen Proving Ground in Edgewood, MD for the Army in the development of mass spectral methods both for the analysis of environmental samples and samples containing chemical warfare agents. He worked in Washington, DC for the Army Corps of Engineers in support of the clean-up of hazardous waste sites both as the manager of quality assurance of chemical data and the manager of the Formerly Used Defense Sites program. He worked, briefly, in Fairfax VA for ICF Kaiser as a consultant in the successful effort to win a hazardous waste clean-up contract. He worked at the Community College in Prince George's County, which is adjacent to the District of Columbia, both as an adjunct professor of organic chemistry and, currently, as an academic tutor of chemistry. He enjoys playing tennis, working in his woods, choral music, and investment strategies. **Education:** B.A., chemistry, North Central College, 1963; Ph.D. organic chemistry, West Virginia University, 1973.

Ms. Bettijoyce Lide

Bettijoyce Breen Lide joined the National Bureau of Standards (NBS), now the National Institute of Standards and Technology (NIST), in June 1969 as a chemist in the Office of Standard Reference Data (OSRD), after graduating from the College of William and Mary with a B.S. in chemistry. She received an M.S. in Chemical Information from American University in 1975.

In the Office of Standard Reference Data, she authored *Omnidata*, the first interactive database management system for handling scientific data. The manual describing this program was selected in 2000 as one of the top hundred publications during the first one hundred years of NBS/NIST. In OSRD, she managed and directed the development of computerized databases and software as output from the program, supervised the introduction of the next generation of typesetting technology into NBS, served on national and international committees to foster collaboration in this area, and later became head of the OSRD Data Systems Development Group. These accomplishments resulted in a *Bronze Medal* "for outstanding service in the use of computers in data activities in the Office of Standard Reference Data."

In 1989 Bettijoyce joined the new NIST Advanced Technology Program (ATP) and was instrumental in establishing the program's policy and operational framework, including setting up and managing the Computer Support Group, establishing a secure local area network, and designing and developing a database system for ATP records management. Later, as a Program Manager, she collaborated with industry, academia, and other organizations to design and implement the Information Infrastructure for Healthcare Program, organizing national workshops to set priorities and share results. The program she managed in this area included a \$360 million-dollar portfolio of cutting-edge research projects in health IT, involving more than 100 participating organizations. For this work, she received the George A. Urriano Award for "leadership and vision in working with the health care industry." Also, as Competitions Manager, Bettijoyce designed, developed, and implemented more customer-oriented proposal solicitation and evaluation structures and served in numerous roles during competitions. She received a second





Honorees Celebrating 50 Years

George A. Uriano Award for this, “for leadership in improving the efficiency and effectiveness of the Advanced Technology Program.”

In 2005, until her retirement in 2013, Bettijoyce served as Senior Advisor and Program Manager for the NIST-wide Health IT Program and as the NIST liaison for the NIST-Department of Health and Human Services (HHS)/Office of the National Coordinator for Health Information Technology (ONC) cooperative agreement. The NIST-ONC collaboration focused on the broad range of initiatives critical to enable Americans to have electronic health records and the development of a nationwide health information network. NIST had key roles, including fostering the development of standards for health IT and in developing the infrastructure for testing the interoperability among health IT software and systems.

In the American Chemical Society, Bettijoyce served as Chairman, Treasurer, and on the Program Committee of the Division of Chemical Information. She also served on the ACS Publications Committee and on the Committee on Science’s Task Force on Scientific Numerical Data. Other memberships include CODATA (International Committee on Data for Science and Technology) and ICSTI (International Council for Scientific and Technical Information).

Mr. David C. Roberts

I am happy to count myself among the organic chemists of the world. I grew up in Madison, Wisconsin and attended the University of Wisconsin where I received a degree in molecular biology. I finally left Madison to go to MIT for graduate school in organic chemistry, doing peptide chemistry in Daniel Kemp’s research group. A two year postdoc at UCLA under Orville Chapman taught me how to do photochemistry at 8 Kelvin and sweat a copper pipe joint. I then joined the faculty first at Rutgers and later at Fordham Universities, pursuing work in peptide and protein chemistry over 7+ years. I then moved to the DC area and joined the MITRE Corporation, followed by the spinoff company Noblis – non-profits -- where I have worked for most of my career on a wide range of topics for many interesting government clients covering the range from chemistry to biology to public health. Now I am retired from full time employment and enjoy working as an “adjunct” volunteer researcher in Prof. Joe Fortunak’s pharmaceutical chemistry laboratory at Howard University, where I get to work side by side with several graduate and undergraduate students and learn and apply some new synthetic methods and analytical techniques along the way.

Dr. David A. Ucko

David A. Ucko shares his experience advancing informal science learning as president of Museums + *more* LLC. He also is senior advisor to the National Center for Science & Civic Engagement, and recently co-chaired The National Academies Committee on Communicating Chemistry in Informal Environments. At the National Science Foundation, he was section head for Informal Science Education and subsequently appointed to the Senior Executive Service as deputy director and then acting director for the Division of Research on Learning in Formal and Informal Settings. There, he initiated the *Learning Science in Informal Environments* study, the





Honorees Celebrating 50 Years

Nanoscale Informal Science Education Network, and the Center for Advancement of Informal Science Education. As founding president of Science City at Union Station, Ucko led development of a themed, immersive science center as linchpin for the \$250+ million transformation of Kansas City's landmark. As vice president for Chicago's Museum of Science & Industry and deputy director for the California Museum of Science & Industry, he produced major exhibitions such as "Everyday Chemistry," "Technology: Chance or Choice?" and "My Daughter, the Scientist." Ucko served as a Presidential appointee to the National Museum Services Board. He authored two college chemistry textbooks while on the faculty of Antioch College and the City University of New York. Ucko is a Fellow of the American Association for the Advancement of Science, and was an NIH Postdoctoral Fellow and a Woodrow Wilson Fellow. He holds a B.A. in chemistry from Columbia and a Ph.D. in inorganic chemistry from M.I.T.

Mr. Roy Shih Shyong Wu

Chemistry has been the cornerstone and foundation of Dr. Roy Wu's career. Over four decades, Roy has engaged in basic, translational and clinical research. After obtaining an AB and PhD in Biochemistry, respectively at University of California Berkeley (1967) and Albert Einstein College of Medicine (1972), he began his career as a post-doctoral fellow and Lecturer in the Department of Zoology at Berkeley. Following academia, he moved into the private sector to work in the newly emerging biotech industry (Biotech Research Laboratories, Rockville, MD) where he got his first taste in drug development. He was responsible for screening compounds against reverse transcriptase from different viruses including HIV. In 1979, Roy moved to the intramural program of the NCI (Molecular Pharmacology) where he performed research in DNA repair, histone gene expression and activity around the cell cycle including histone modifications such as ubiquitination, acetylation and phosphorylation.

Seven years later, he joined the Division of Cancer Treatment and Diagnosis in the Cancer Therapy Evaluation Program (CTEP) as the sole Program Director for the clinical grants program. In 2000, after 14 years of success in which he was responsible for the 12-fold increase in the CTEP grants portfolio, he became Branch Chief of the newly formed Clinical Grants and Contracts Branch. On average, the Branch managed \$300 million per year in grants, contracts and cooperative agreements.

Roy has been recognized for his accomplishments through numerous awards from the private and public sectors. In addition to the awards from the NCI and NIH, three awards that he is particularly proud of are: the 2016 Public Service Award from the American Society of Hematology, the 2001 Public Service Award from the American Society for Blood and Marrow Transplantation and the 2008 DHHS Hubert Humphrey Team Award for Science to America.

Dr. Wu retired from federal service in April 2016 and now continues to volunteer with the NCI.





Honorees Celebrating 60 Years

Mr. Anthony F. Dorrzapf, Jr.

In November of 1937 the career of an Analytical Chemist was born in Jersey City, NJ. In 21 years, he graduated from St. Peter's Prep and St. Peter's College with a BS in Chemistry, and a commission as a 2nd Lieutenant in the Army Chemical Corps. He went on to get a MS from the University of Maryland and married Mary in 1960. In June we will be married 60 years.

The Army thought he should move to Pine Bluff Arsenal in Arkansas where he helped develop methods in analysis for chemical and biochemical agents. Then the Army had a need for him to replace a Major and run the Officers Club!

Returning to the DC area, he worked at Melpar until he received an invitation to join the Analytical Chemistry Lab at the US Geological Survey where he did research and method development for minerals and on geological samples including some of the moon rocks. He retired in 2006 after 40 years of Government service.

He and Mary spend time with our children, grandchildren and great grandchildren. They think back to the time Tony founded the Chantilly Soccer Club and led the National Capital Soccer League.

Dr. Donald G. Rea Education: B. Sc. and M. Sc., chemistry, U. Manitoba; Ph. D., physical chemistry, M.I.T., 1954; post doctoral, Oxford U., 1954-55

Professional career: California Research Corporation, 1955-61; Space Sciences Laboratory, U. Berkeley, 1961-68; NASA Headquarters, 1968-70; Jet Propulsion Laboratory, 1970-91; MITRE, 1991-95

Retirement: AAAS STEM Volunteer Program, 2004-present

Mr. Robert A. Walde Graduated from Georgetown U. with BS Chemistry in 1955, attended Carnegie Mellon U. for graduate study in chemistry and chemical engineering and Lehigh U. in business administration. Worked in industry from 1955 to 1990 for Gulf Oil as Research Chemist, Manager of Commercial Development and Marketing and VP of Government Technology Coordination; Air Products and Chemicals as Manager of Chemical Research and Allegheny International as Director of Corporate Technology. Involved in private business from 1990 to present as part owner and officer of Shore Corporation (Specialty chemicals) Surtreat Holding, LLC (concrete structure restoration) and VCI Coatings, LLC (corrosion inhibiting coatings). Member of: NACE, ACI, ICRI, SSPC, SCHB

Live in Haymarket, VA, married with 3 children and 2 grandchildren. Pastime playing golf, tennis and fishing.





Honorees Celebrating 60 Years

Dr. Denys J. Voaden

I was born in 1926 in a small country town in West of England, and first encountered Chemistry in about 1936 at the local Grammar School, where it was taught by a dedicated and enthusiastic master (I had a poor introduction to physics at this school – of which more later).

Toward the end of 1941 I became keener on chemical studies, though largely on my own, especially reading books from the county library system – I gradually became enamoured of dyestuffs and natural products – at an unsophisticated age! My heroes were Emil Fischer and Adolf von Baeyer! I did some lab work at school, and then a fellow classmate showed me how to make fireworks. I could in those days buy what I needed at a local pharmacy!

In September 1943 I went to Imperial College (U of London) to study for a B.Sc. This was war-time, and apart from rationing problems there were Luftwaffe air raids on London. One of my “duties” was to go to roof-tops and be a fire-spotter, but I also spent many nights in an air-raid shelter... Prominent chemists at Imperial College included Sir Ian Heilbron (organic) and several others. Eventually that PHYSICS weakness failed me – on D-Day June 6, 1944, I flunked that examination and for some time did “National Service” as a coal-mine worker.

Then in 1947-1948 I served in a Pathological Laboratory of the British Army in Egypt, but in 1949 I entered Oxford University, gaining my M.A., and a B.Sc. for some alkaloid-related research. I gained my D.Phil. for research on mesoionic heterocycles (sydnones). After Oxford I did some industrial and post-doctoral work but was invited by Professor I.M. Hunsberger of Fordham University to work on sydnones. I arrived in early April 1959 and within a couple of days we went to Boston for an AGM of the American Chemical Society, where I became a member. There were many examples of “culture shock” [both ways] for a foreigner in the USA.

With Prof. Hunsberger I moved to Massachusetts University in Amherst at the end of 1960, working on heterocycles and alkaloids, depending on financial support.

Finally I settled at the USDA Research Center in Beltsville, Maryland – at a time of changes, more often driven by politics than pure science. From 1971-1973 I was seconded to a pesticide laboratory in Cairo, though with no great result, because of the Egyptian bureaucracy and eventual lack of UNDP funding.

On returning to Beltsville in 1973 I found that much had changed. Many “old-timers” had left. My work thereafter was mostly on insect pheromones. I retired in 1997.

My interest in chemistry is still high – I find the mixture of technical and commercial information in C&E News very informative. I also receive Chemistry World from the Royal Institute of Chemistry.

I find that today’s chemistry is so different – not just instrumental; everything can now be made with exotic catalysts – so “magical”!





Honorees Celebrating 70 Years

Mr. John D. Buchanan John D. Buchanan was born in 1927 and served in the U.S. Navy at the end of World War II, discharging troops as they returned from war in the Pacific. He attended the University of Arizona on the GI Bill, earning a B.S. in Chemistry in 1949, and joining the ACS the same year. From 1950 to 1975, he worked in private industry, developing expertise in fields including radiochemical analysis, radiological monitoring, neutron activation analysis, and radioactive tracer applications. During that time [1970], he became a Certified Health Physicist. From 1975 until his retirement in 1997, he served at the Nuclear Regulatory Commission as a Senior Health Physicist. He is the author of over thirty technical publications and presentations.

