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

Alfio's La Trattorio Restaurant
Chevy Chase, Maryland

December 15, 2018

Chemical Society of Washington
1155 Sixteenth Street, NW O-218 Washington, DC 20036
Voice Mail: (202) 659-2650 E-Mail : csw@acs.org

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

Celebrating 50 Years:

Mr. David Burton Bagwell
Dr. William Raymond Barger
Dr. John Lindsay Barker
Mr. Peter Jacob Baum
Dr. Arnold Peter Borsetti
Dr. Anthony Joseph Bur
Dr. Yuan-Yuan Chiu
Dr. Shuang Ling Chong
Dr. Bert Marcel Coursey
Dr. Mohamed Tawfik El Ghamry
Mr. James Kenneth Grant
Dr. Brian Michael Harney
Dr. Charalingayya B. Hiremath
Dr. Allan K. Hovland
Dr. Michael Klein
Dr. Jerome Anthony Klun
Dr. Thomas Bing Kin Lee
Ms.. Elizabeth M Leovey
Dr. N Bhushan Mandava
Dr. Shyam Behari Mathur
Dr. Dennis Pershing Nelson
Dr. David B. Neumann
Ms. Carolyn K. Offutt
Dr. Phillip R. Reed
Dr. Michael Eugene Rogers
Dr. Walter Frederick Rowe
Dr. Douglas Edward Zabel

Celebrating 60 Years:

Dr. Howard S. Bender
Dr. Edward A. Caress
Dr. Lois Anna Cook
Mr. Sam R. Coriell
Dr. Martin R. Feldman
Mr. John W. Gunn Jr.
Dr. J. William Hirzy
Mr. Lester A. Kitchman
Dr. David Phillip Kosow
Mr. David H. Leroy
Ms. Marcia D. Litwack
Dr. Gerald R. Miller
Dr. Michael A. Oxman
Dr. Vivian B. Parker
Dr. Judith Ann Pauley
Ms. Caroline A. Sasser
Dr. Lorna T. Sniegoski
Dr. Sanford T. Young

Celebrating 70 or more Years:

Mr. John Francis Babashak
Dr. Chester W. Delong
Mr. Howard T. Mars
Dr. D. B. Merrifield
Dr. H. Todd Miles
Mr. Edwin A. Morgenstern
Dr. Robert Alan Resnik Dr. Kurt H. Stern
Dr. James R. Wright Mr. Alfred Shaines (73)
Dr. Elizabeth K. Weisburger (73)
Dr. Maurice Fried (74)
Mr. Stephen M. Oleck (74)
Mr. Warren K. Eister (75)
Mr. Irving Kabik (75)
Mr. Miller Harrell Peterson (75)
Mr. Robert Gumbinner (76)
Dr. Erwin Klingsberg (76)
Mr. Patrick J. Hannan (77)
Dr. Murray B. Hundert (77)
Dr. John A. Krynitsky (77)
Dr. Jerome L. Rosenberg (77)

SPEAKER

Dr. Teri Quinn Gray
Global Technology Portfolio Leader with Transportation & Advanced Polymers
DowDuPont

"The Chemical Society of Washington (CSW) and the American Chemical Society (ACS): The Past, Present and into the Future"

Biography

Teri is Global Technology Portfolio Leader with Transportation & Advanced Polymers at DowDuPont. Just prior, she worked as Regional Technology Manager serving USA, Canada and Mexico in DuPont Performance Materials, and as New Product Commercialization Manager with DuPont Crop Protection.

Dr. Gray joined the American Chemical Society (ACS) Board of Directors in January 2018, is a founding member of the ACS Diversity & Inclusion Advisory Board, and served on the ACS Women Chemists Committee in various roles over 10+ years. Teri's passion for educational opportunities for all children affords the opportunity to serve on several boards, including the Executive Committee for the Delaware Foundation for Science & Math Education, the Delaware Campaign for Action Now (DECAN), the Community Education Building (CEB) and Zip Code Wilmington. Teri served as President of the Delaware State Board of Education for 8 years, appointed by Governor Jack Markell in 2009, and co-chair of the Delaware STEM Council since 2012.

Her community outreach includes working with the Bear-Glasgow YMCA of DE Community Gifts Campaign, serving as Executive on Loan to United Way of Delaware, and various leadership roles within the Episcopal Diocese of Delaware.

In 2014, Dr. Gray received Delaware's 25th Annual Strong, Smart, and Bold Award from Girl's Inc. for her civic leadership and as a role model for girls; and soon thereafter, honored with the distinguished Willoughby Award from Junior Achievement of Delaware to encourage volunteerism and advocacy in STEM.

She holds a B.S. in Chemistry from Jackson State University in Mississippi; earned a PhD in Analytical Chemistry from the University of Maryland College Park, and worked as National Research Council Postdoctoral Fellow at the National Institute of Standards & Technology prior to joining DuPont in 1997. She loves reading, blues, red wine and "circle time" with family. Teri and her husband, Bernard, live in Newark, DE and have one son and a 9-month old grandson.

Abstract

CSW and ACS have a rich history and a bright future. The talk will highlight some of CSW's history, current program's and the strategic plan taking ACS into the future.

Honorees Celebrating 50 Years

Mr. David Burton Bagwell Mr. David Burton Bagwell majored in chemistry in undergraduate studies, studied chemistry at the Ohio State University and received a Master's degree from the University of Maryland, School of Pharmacy. Thesis topic was the preparation and testing of some Napthyl-barbiturates. He was employed by the Community College of Baltimore County (CCBC) from 1967-2002 where he taught General Chemistry, Introduction to Organic Chemistry and some General Science courses. Mr. Bagwell served as an interim Chair of the Chemistry Department, participated in the college governance (Senate), serving on various committees, and was instrumental in helping to introduce computer enhanced instruction in the laboratory curriculum. During a sabbatical leave he worked in the McCormick food research laboratory.

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Dr. William Raymond Barger Dr. William R. Barger was a Surface Chemist with the Chemistry Division of the Naval Research Laboratory (NRL) Washington, DC and retired in 1998. For several years afterwards he was a Senior Research Scientist with Geo-Centers, Inc. working as an intermittent, part-time contractor at NRL. Bill was born in Baltimore, MD, in 1942, and now lives on Cobb Island, MD. While studying Chemistry at the University of Maryland, College Park, he was a Laboratory Assistant with the Market Quality Research Div., ARS, USDA, Beltsville, MD, and received his B.S. degree in January, 1967. Recruited by the Naval Research Laboratory, in February 1967 he joined the Interface Chemistry Section of the Chemical Oceanography Branch, Ocean Sciences Div., NRL. In 1973 this Section became part of the Environmental Chemistry Branch, Environmental Sciences Div. Bill worked alongside oceanographers and participated in many oceanographic expeditions. Major research topics were the chemistry of the air/sea interface (organic monolayer surface films) and dissolved hydrogen in seawater. Awarded an NRL Edison Fellowship in 1980, Bill studied part-time at the University of Maryland Dept. of Chemistry Analytical, Nuclear and Environmental Division and received his Ph.D. in 1985. His doctoral research was done partly at the Chesapeake Biological Laboratory, Solomons, MD. In 1982 while still a part-time doctoral student, Bill joined the Chemical Defense and Countermeasures Materials Section of the Surface Chemistry Branch, Chemistry Div., NRL. Research involved applying ultra-thin stacked organic monolayer films (L-B films) to microelectronic devices to create new types of gas sensors. From 1994 to 1998, Bill was with the Advanced Surface Spectroscopy Section of the Surface Chemistry Branch. AFM and other surface spectroscopy techniques were used to study LB films applied to surfaces. After retirement Bill continued this research as a contractor.

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Dr. Anthony Joseph Bur After obtaining his PhD in polymer physics from Penn State in 1962, Dr. Bur joined the National Institute of Standards and Technology (NIST) in Gaithersburg, MD. Here he spent the major part of his professional career in the NIST Polymers Division carrying out research on polymers materials properties and developing new instrumentation to monitor polymer manufacturing. He founded and directed the Polymer Processing Laboratory. The goal of the laboratory program was to update measuring capabilities employed in plastics manufacturing and to assist US plastics industry during the transition from analog to digital measuring systems. The research was carried out in collaboration with industry via a formal NIST/industry consortium in which over twenty US companies participated during the course of the twenty five year program. Many new measuring techniques based on optical, ultrasonics, fluorescence spectroscopy, piezoelectric and dielectric concepts were developed. In many cases, Dr. Bur shipped NIST developed instruments to industry labs and carried out experiments on location. New developments were introduced to the broader technical community via published technical papers and patents, lectures, workshops and symposia. In order to reach as wide an audience as possible, Dr. Bur established The Process Monitoring and Engineering group within the Society of Plastics Engineers (SPE), and under

the umbrella of this group organized symposia at national meetings to announce new developments coming from NIST and industry partners. For many years NIST was the leading voice in the world of new measuring techniques supporting US plastics manufacturing. Among the many successes of the polymer processing program, Dr. Bur is best known for three outstanding accomplishments: the discovery of a new class of fluorescent dye, the band definition dye, that has been used to monitor temperature of molten plastic during processing, second, solving a long standing industry problem, namely the development of an accurate quantitative scale to measure clay exfoliation in polymer/clay composites, a high strength, flame retardant industrial product used in construction, heavy machinery and automobiles, and third, the design and construction of the dielectric slit die, a multifunctional process monitoring instrument. He was elected a fellow of SPE and his contributions were recognized by many awards including The SPE International Research Award, The NIST Slichter Award for Technology Transfer, The NIST Bronze Medal, The Federal Laboratory Technology Transfer Award and The Dow Chemical Best Research Paper Award. After retirement from NIST in 2006, Dr. Bur, along with his colleague Dr. Michael McBrearty, founded a scientific instrument manufacturing company to produce plastics characterization instruments some of which were based on the NIST instrument designs.

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Dr. Yuan-Yuan Chiu Dr. Chiu received her BS degree in Chemical Engineering at the National Cheng Kung University in Taiwan, her MS at Wellesley College, and her Ph.D. in Physical Chemistry at Harvard. After completing her PhD, she moved on to become a Post-Doc. and Research Associate in the field of Biochemistry, Immunology and Molecular Biology at Johns Hopkins Medical School. She spent many years at the FDA, holding the positions of Review Chemist in the Bureau of Drugs, FDA (where she was the principle Chemistry/Manufacturing/Controls reviewer of the first biotechnology drug, human insulin), Director of the Office of New Drug Chemistry, Center for Drugs Research and Evaluation and Acting Director of the Office of Biotechnology Products, Center for Drug Research and Evaluation. She then became Senior Director for Strategic Operations at Genentech, retiring in 2007.

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Dr. Shuang Ling Chong Dr. Shuang-Ling Cheng Chong, received a B.S. in Chemistry at the National Cheng Kung University, Taiwan and an MS and Ph.D. in Physical Chemistry at Rutgers University, NJ. Dr. Chong has been an ACS member since 1968, and is a world expert in oil shale/shale oil and bridge coatings with 40 years of research experience with >50 publications. Dr. Chong is a member of the ASTM D01 and SSPC technical committees and Oversight Board Member of the NIST “Coating Service Life Prediction Consortium.” At the Department of Energy (DOE) and Department of Transportation (DOT), Dr. Chong’s research involved the conversion of oil shale-to-shale oil using supercritical fluid extraction technology, the separation and characterization of shale oils and coal liquids, and identification of hazardous compounds in solid wastes produced from coal-fired power plants. At the Federal Highway Administration (FHWA), she spearheaded the development of Long Life Steel Bridge Coatings that are environmentally-compliant, cost effective, and practical to maintain; developed the “Chong Cycle”, an essential component of the ISO Method 20340:2009, which is used worldwide for evaluating the durability of bridge coatings in the presence of aggressive environments; and developed the ASTM D7087-05a method for quantifying failure of bridge coatings. As manager of the FHWA Paint & Corrosion Laboratory, she also provided technical leadership for addressing both US and State bridge coating issues, including site visits and serving as a QA member of US State Coating Evaluation Program. Dr. Chong received numerous performance and best paper awards, including the DOT-FHWA Superior Achievement Award citing “For your Commitment to Excellence and Consistent Superior

Performance in Developing and Advancing Bridge Coating Technology".

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Dr. Bert Marcel Coursey Dr. Bert Coursey is a Guest Researcher in the NIST Standards Services Group. He joined the National Institute of Standards and Technology (NIST) (formerly the National Bureau of Standards) in 1972 and for the following 15 years worked on radioactivity standards for environmental radioactivity and nuclear medicine. More recently he has held management positions in radiation dosimetry and served as Chief of the Ionizing Radiation Division in the NIST Physics Laboratory. From 2003 to 2011, Dr. Coursey was on assignment to the U.S. Department of Homeland Security (DHS) as Chief of the Office of Standards in the Science & Technology Directorate. In 2004 he was appointed the Standards Executive for the Department. His office was responsible for the design and implementation of a national program for standards for homeland security. A partial listing of the DHS standards projects includes performance standards and testing and evaluation protocols for chemical, biological and radiological/nuclear detectors for emergency responders, explosives detection equipment, standards for preparedness, critical infrastructure protection, emergency management and resilience, and performance standards for information technology (IT) to include credentialing, biometrics and cyber security. Dr. Coursey is a recipient of the Bronze (1987), Silver (1997) and Gold (2002) Medals of the Department of Commerce. He is also a recipient of the Allen V. Astin Award and the Edward Bennet Rosa Award of the NIST. He is a past president of the International Committee for Radionuclide Metrology, and a Fellow of the American Association of Physicists in Medicine and the Standards Engineering Society. Dr. Coursey has over one hundred publications on radioactivity standards and applied radiation dosimetry and has served for 35 years as editor of the journal *Applied Radiation and Isotopes.* Dr. Coursey received his B.S. degree in Chemistry in 1965, and the Ph.D. in Physical Chemistry in 1970, from the University of Georgia.

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Mr. James Kenneth Grant James Grant, the grandson of Polish immigrants and the son of a carpenter and stay-at-home mom, grew up with extended family in a two-flat on Chicago's south side. His parents instilled in him a lifelong desire to learn and encouraged his interest in chemistry. He initially attended the University of Pennsylvania, and later graduated from the University of Illinois-Champaign with a B.S. in Chemical Engineering in 1969. After graduation, he was a process engineer, a maintenance engineer, and later a production supervisor for Monsanto at a plant near St. Louis, Missouri. Six years later, he accepted a position as a senior process engineer at Mallinckrodt in St. Louis, a major manufacturer of analgesics, radiopharmaceuticals, and laboratory chemicals. In this position, he worked with organic chemists in the development of new drug manufacturing processes. Throughout the 1970s and early 80s, he furthered his education by earning a master's degree in chemical engineering from Washington University in St. Louis, a master's degree in engineering management from the Missouri University of Science and Technology, and a master's degree in chemistry from the University of Missouri-St. Louis. In 1981, Grant became the director of environmental affairs at Mallinckrodt with international responsibility. At that time, significant new environmental laws and regulations were being rolled out. And, in this position he also had responsible for radiation safety, and the preparation of product Safety Data Sheets. Later, he became director of environmental remediation and restoration for Tyco Healthcare Mallinckrodt. Grant managed "legacy" remediation and restoration projects throughout North America. For example, Mallinckrodt processed uranium for the Manhattan Project and into the late1950s. Grant worked with the U.S. Department of Energy and Army Corps of Engineers to evaluate and execute cleanups of these old sites in the St. Louis region. In 2007, he joined the Transportation Security Administration as Hazardous Materials Program Manager. In this position, he is responsible for the program that collects, transports,

and disposes of hazardous waste generated by the 440 TSA airport operations within the continental U.S as well as Alaska, Puerto Rico, the United States Virgin Islands, Hawaiian Islands, North Mariana Islands, and Samoa Islands. And, he also serves as a subject matter expert on hazardous material management. The James K. Grant Scholarship provides a scholarship for undergraduate chemical engineering students at the University of Illinois. Dr. Grant is a Registered Professional Engineer (PE) in Missouri and Illinois, and a Certified Hazardous Materials Manager (CHMM), Certified Safety Professional (CSP), and Registered Environmental Manager (REM).

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Dr. Brian Michael Harney Dr. Brian M. Harney received his B.S. in Chemistry from Manhattan College in 1965 and his PhD in Physical Chemistry from the University of Pittsburgh in 1970. After graduate school, Dr. Harney worked at the Department of Interior Pittsburgh Energy Research Center and in 1972, he transferred to the Interior Department Washington office. Federal energy R&D was later consolidated in the US Department of Energy where Dr. Harney managed DOE's oil shale program. In 1981, Dr. Harney joined Mobil R&D Corp in Princeton, NJ., managing a number of oil shale projects. In 1988, he transferred to Mobil Oil Corp headquarters in Fairfax VA. After Exxon acquired Mobil Oil in 2000, Dr. Harney worked on domestic and international regulatory issues for the ExxonMobil Refining & Supply Company. He retired from ExxonMobil in 2012. Dr. Harney's wife is Carol R. Harney who is a retired intellectual property attorney. They have two adult children and two grandchildren who are the light of their lives. They reside in McLean, VA.

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Dr. Allan K. Hovland Dr. Allan K. Hovland was born in Chicago, IL. He earned his B.S. in chemistry at the New Mexico Institute of Mining and Technology. He received his Ph.D. in inorganic chemistry at Wayne State University where he met his wife Macy. He then took a post-doctoral position at Iowa State University under Dr. Tom Barton, recent ACS president. After a one-year lectureship at North Texas State University, he taught for five years at Angelina College, a community college in east Texas. In 1982, he accepted a teacher position at St. Mary's College of Maryland where he was the inorganic chemist until he retired in May, 2018. While at St. Mary's, when the college introduced departments, he was selected to be the first chair of the chemistry department. During his tenure at the college, he introduced several new courses including a chemistry course for students not majoring in the sciences, a course on searching the chemical literature and a course on organometallic chemistry. In addition to his teaching at the college, he contributed to the science/chemistry knowledge for students and teachers in Southern Maryland. For fifteen years, he received funding from the Maryland Higher Education Commission to support conducting in-service programs in science, primarily for elementary school teachers. Over 600 teachers participated in these programs. He has visited dozens of schools doing chemistry presentation in the spirit of Mr. Wizard or Bill Nye. For 32 years, he was the president of the St. Mary's County Science and Engineering Fair Board, an independent all-volunteer board that administered the annual county science and engineering fair. Al & Macy have 2 sons, Martin and Douglas. Martin was a geotechnical engineer and is now in real estate in Matthews, NC. Doug got his B. A. in chemistry at St. Mary's College of Maryland (he had his dad for two classes). After getting a M. S. in chemistry from the University of Oregon, Doug returned to St. Mary's College as the laboratory coordinator and had an office three doors down from his dad.

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Honorees Celebrating 50 Years

Dr. Jerome Anthony Klun During my 39 years of entomological study, I conducted research on the chemical nature of host-plant resistance in corn, made discoveries in the field of insect sex pheromone chemistry and pioneered a benchmark accomplishment in the field of blood-feeding insect repellent research. The work has had significant impact on science and technology. I have authored 118 publications, including six papers published in the journal *Science* and five patents, and became recognized internationally in two arenas of entomological research: agricultural entomology and medical entomology. Dr. Klun says, "I am pleased to have been American Chemical Society member over the last 50 years!"

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Dr. N Bhushan Mandava Dr. Mandava holds a Ph.D. Degree in Bio-Organic Chemistry. He was Visiting Professor at American University, Southern Illinois University, and Indian Institute of Science. He was a Visiting Scientist at USDA, Philadelphia, PA. After spending 4 years in academic research, Dr. Mandava joined the USDA in Beltsville, MD in 1968. He was transferred to U.S. Environmental Protection Agency in Washington, DC in 1982. In 1986, he left the Federal Government to pursue other interests and founded Mandava Associates in Washington, DC. In 1991, Dr. Mandava formed Repar Corporation to market pesticides. He has received several awards from American Chemical Society and American Institute of Chemists, and the Federal Government, and was elected as a Fellow of American Chemical Society and also American Institute of Chemists. He has published more than 160 research papers, and edited 3 books in addition to a 6-volume CRC Handbook Series on Naturally Occurring Pesticides. Dr. Mandava has been active in American Chemical Society and served as Councilor for more than 25 years. Dr. Mandava helped the ACS to form India Chapter. In 2017, he visited Bangalore and Mumbai to review the Chapter activities. He has been serving as Career Consultant to assist members in finding employment. He also serves as an ACS Ambassador to promote the public understanding of science. Dr. Mandava served as Advisor to United Nations Agencies (UNIDO, UNDP and FAO) for 5 years to advise the country governments in Asia and the Pacific Region on matters related to health and safety of agrochemicals.

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Dr. Dennis Pershing Nelson Dr. Nelson was born, raised and educated in Utah. At an early age he developed an interest in science and the physical world. In school he was particularly interested in the subjects of Chemistry, Physics and Biology. He was awarded the Bosch & Lomb medal in High School for showing exceptional promise in science. He earned a B.S. (1967) and a Ph.D. (1971) degree in Chemistry at Brigham Young University in Provo, Utah. His dissertation was titled "A Calorimetric Study of Metal-ion Cyclic Polyether Interaction." He published papers on this and similar studies which were intended to model and elucidate mechanisms for the active transport of metal ions across biological membranes. During Graduate School Dr. Nelson was commissioned as an officer in the US Navy Medical Service Corps as a Biochemist. After graduation in 1971, Dr. Nelson was promoted to Lieutenant and assigned to the Naval Medical Research Institute, Bethesda, MD where he performed research on oxygen binding to hemoglobin and examined the role of biological molecules and other factors which modulate the oxygen binding curve. He also studied the effects and toxicity of hyperbaric oxygen on tissues, which is an important consideration in deep diving.In 1976, he was transferred to the San Diego Naval Hospital as laboratory officer in the Clinical Investigation Center where he assisted hospital staff and residents with clinical and laboratory research projects and supervised technical personnel. He was a consultant in statistical methods for research and developed microcomputer capability at the Center. In 1982, he was transferred to the Naval Health Research Center, San Diego where he performed independent research and developed sensitive immunoassay techniques for the rapid identification of microbial antigens in biological and environmental samples. He also developed computer models to

predict the sensitivity of immunoassays based on the affinity of the capture antibody. In 1985, he was transferred to the Uniformed Services University of the Health Sciences, Bethesda, MD as Academic/Research Projects Officer in the University Computer Center. There he served as a consultant to the faulty on computer applications in teaching and research. This included experimental design, statistical analysis, mathematical modeling, numerical analysis, telecommunications, networking, programing, computer graphics, computer aided instruction, computerized decision support, data base management, office automation, etc. In 1989, he was appointed as Deputy Director for Academic Computing in the Computer center where he developed computerized teaching methods and established a microcomputer Support Center to develop and expand end-user computing and computer literacy at the University. He also designed and installed a University-wide local area network and connected it to the World Wide Web (WWW) via ARPANET. This became the Internet.

In 1990, CDR Nelson was made Director of the University Computer Center in which position he served until his military retirement in 1993. He was responsible for the operation of the Center and its four divisions: Operations, Telecommunications, Systems Development/ Support and End-User Computing/Training. As such, he coordinated the long-range planning for the Center, managed a multi-million dollar budget, oversaw major equipment procurement/ installation and supervised a staff of 20.

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Honorees Celebrating 60 Years

Dr. Howard S. Bender Dr. Bender was born in New York City in 1935. He obtained a B.S in Chemistry from the University of Buffalo in 1957, an M.S. in Chemistry from Bucknell University in 1959 and a Ph.D. in Organic Chemistry from the University of Delaware in 1962. His thesis, under the direction of Professor Betty Dyer, involved the synthesis of anti-cancer compounds based on 6-mercaptopurine.From 1962 to 1965 Dr. Bender was employed by the Interchemical Corporation as a Research Chemist. From 1965 to 1984 he worked at the General Motors Research Laboratory in Warren, Michigan where he became the Group Leader in the development of new automotive coatings. In1984 he joined the Masonite Corporation, a manufacturer of "hardboard", as Head of the Coatings Department. Three years later he joined Sancor Industries in Leominster, Massachusetts as Director of Research and was instrumental in the development of Polyurethane Dispersions (PUDs) which today find use in a large variety of coatings, inks and adhesives. In 1994 Sancor Industries was purchased by the BFGoodrich Company and Dr. Bender transferred to Cleveland, Ohio where he became Marketing Manager for the "Sancure" line of PUD's.

In 1998 Dr. Bender retired to Cape Cod and formed the consulting company P.U.D. Technology. His company did market research and advised on waterborne urethane technology. While at Sancore Industries and BFGoodrich, he was responsible for adding new compounds to the Toxic Substance Control Act (TSCA) inventory. In retirement he used his knowledge to assist foreign companies in adding compounds to the TSCA inventory.

Dr. Bender is a two-time winner of the Roon Award presented by the Federation of Coating Technology for outstanding coating research. He served for many years on the Editorial Review Board of the Journal of Coating Technology and is a past chairman of the Gordon Research Conference on Coatings and Films. He has written and lectured extensively on PUD chemistry. He retired, again, in 2012 and presently lives with his wife in Reston, Virginia.

Mr. Sam R. Coriell Dr. Coriell obtained both his BS and PhD in Chemistry at the Ohio State University. From 1961 to 2000, he worked at the National Institute of Standards and Technology. Over the years, he had published over 150 publications in the areas of Mathematical and Computational Modeling of Materials Processing, Theory of Crystal Growth and Alloy Solidification, Heat Flow, Diffusion, and Fluid Flow, and Interfacial and Hydrodynamic Instabilities. He has been a member of Phi Beta Kappa, the American Chemical Society, the American Physical Society (elected Fellow 2000), the Minerals, Metals, & Materials Society (Bruce Chalmers Award 1999), ASM International (elected Fellow 1991), and the American Association for Crystal Growth (Executive Committee 1981-1993). He also served on the Board of Trustees of the Federation of Materials Societies from 1981 to 1986 as Associate Editor of the Journal of Crystal Growth from 1994 to 2000. Dr. Coriell was Chairman of the 1989 Gordon Research Conference on Gravitational Effects in Materials. His honors include Department of Commerce Silver Medals in 1971 and 1993, the 1999 Bruce Chalmers Award from the Minerals, Metals, & Materials Society and the 2001 Frank Prize from the International Organization of Crystal Growth.

Honorees Celebrating 60 Years

Dr. Martin R. Feldman Dr. Martin R. Feldman was a professor of chemistry at Howard University from 1963 to 2003. In that time he was a member of ACS Divisions of Organic Chemistry, History of Chemistry, and Chemical Education. Dr. Feldman was born in New York City and graduated from Bronx H. S. of Science and Columbia University. At Columbia he was Prof. R. Breslow's first undergraduate research student. He received his Ph. D. from UCLA, supervised by Prof. S. Winstein, and spent a postdoctoral year at Berkeley, with Prof. A. Streitwieser. Dr. Feldman taught organic chemistry at Howard and established a research program in physical organic chemistry. He received an NSF Faculty Fellowship for studies in physical organic chemistry, and a Smithsonian Faculty Fellowship for research at the National Museum of American History. After he retired, he enrolled in sculpture classes at Montgomery College, and several of his pieces have been included in juried shows of the Washington Sculptors Group. He has been a Science Coach and Chemistry Ambassador as a volunteer in 7th grade science classes in Takoma Park Middle School since 2008.

Mr. Lester A. Kitchman Les Kitchman had a distinguished 35 year career with the federal government, Department of the Army, where he held numerous positions. He conducted and managed research, prototype design, full-scale development, and production in support of electronic fuzing for conventional and nuclear artillery and missile systems. Under Les's management, this body of work conformed with rigid military electrical and environmental specifications required. Les headed the Office of Concurrent Engineering within the Army Research Laboratory Command and was appointed to the Army Acquisition Corps. He holds a Bachelor's degree in chemistry from Hunter College and a Master of Science degree in Chemistry from Virginia Tech.

Dr. Michael A. Oxman Dr. Oxman received his BS in Pharmacy and his MS in Pharmaceutical Chemistry at University of Wisconsin. He was a Graduate Student at the University of Kansas School of Pharmacy, and he received his PhD in Medicinal University of Wisconsin School of Pharmacy in 1963. After completing his studies, he was a Research and Production Chemist at Aldrich Chemical Company before becoming a Commissioned Officer in the US Public Health Service and then a Research Chemist at the National Institute of Arthritis, Metabolic and Digestive Diseases, Laboratory of Chemistry, National Institutes of Health. Dr. Oxman served as a Research Chemist at Sterling Winthrop Research Institute, Rennselear, NY, and then returned to the NIH to serve in a number of roles until 2003, including Health Scientist Administrator; Branch Chief, Toxicology Information Program: Executive Secretary, National Heart, Lung and Blood Institute; Executive Secretary, Division of Research Resources; Assistant Director for Review, Division of Research Resources; Chief, Office of Review, National Institute on Aging; Special Expert, National Institute on Environmental Health Sciences; and Special Expert, Center for Scientific Review. Most recently Dr. Oxman has been a Volunteer Registered Pharmacist at Walter Reed National Military Medical Center in Bethesda.

Honorees Celebrating 60 Years

Dr. Vivian B. Parker Dr. Vivian Parker received a BS from Brooklyn College in physical chemistry and mathematics in 1952, followed by a PhD in 1955 from Penn State in physical chemistry, completing her thesis on surface tension. Dr. Parker began her career at Indian Head Naval Powder Factory in 1955. She transferred to NIST (then NBS) in 1956 and worked there for over 35 years, mostly in the thermo chemistry section evaluating chemical thermodynamic properties of the elements and their compounds. Dr. Parker has had her work published in numerous publications and formally retired from NIST in 1988, serving as a contractor until 1992. Since retiring, Dr. Parker enjoys oil painting and is a copyist at NGA. Her husband, Dr. Robert Parker, worked at, and retired from NIST as well. They have two children, David and Susan, and two granddaughters.

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Dr. Lorna T. Sniegoski Dr. Lorna T. Sniegoski received a B.A. with high honors in chemistry from Douglass College, Rutgers University, and a Ph.D. in chemistry from Maryland University. Her professional career was spent at the National Institute of Standards and Technology (NIST, formerly the National Bureau of Standards, NBS). Research interests included the synthesis of carbon-14- and tritium-labeled carbohydrates, the development of highly accurate (GC/MS) methods of analysis for clinically significant analytes, and preparation and certification of clinical standard reference materials. She received the Department of Commerce Bronze Medal Award, and is a member of Sigma Xi and Phi Beta Kappa. Activities outside of chemistry include serving as the volunteer bookkeeper of the NIST Child Association and church activities.

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Honorees Celebrating 60 Years

Honorees Celebrating 70 or more Years

Dr. Kurt H. Stern (70 years) Dr. Kurt Stern, son of D. Daniel and Bertha Klein Stern, was born in 1926 in Vienna Austria, where his father owned a small business producing chemicals (some of his own formulation) for the shoe industry. The Nazi annexation of Austria led to the family's move to the United States in November 1939. They settled in New Jersey where cousins they never met sponsored them. Because Kurt was only 16 when he graduated high school, he was able to complete 2 ½ years at Drew University before he was drafted in April 1945. When his fluency in German was finally discovered, he was sent to Germany where after serving as an interpreter for a CIC officer, Kurt was made a special Agent in CIC and transferred to 3rd Army Headquarters in Heidelberg. While there he took a music course in Medieval Composition. After his discharge, Kurt returned to Drew, changed his major to Chemistry and graduated in 1948. In 1950 he received his MS degree in physical chemistry from the University of Michigan. In 1951, the paper describing research he did at Ann Arbor received the Turner Prize, an award for the best paper in the Electrochemical Society Journal by authors under 30. He received his PhD from Clark University in 1953, where for a time he sublet an apartment from the artist Leonard Baskin. For seven years he taught and conducted research (US Airforce and NSF sponsored) at the University of Arkansas, primarily in non-aqueous and molten salt electrochemistry. A sabbatical year at NBS (now NIST) led to a permanent position there. He was a Project Leader in High Temperature Electrochemistry and was the coordinator for the National Standard Data Reference System established by NBS in 1963. A reduced budget appropriation led the Chief of the Electricity Division to eliminate the entire electrochemistry section in 1968. As a result, Kurt spent three months that summer on an NSF program, teaching modern methods to Indian college teachers of chemistry in Nagpur, India. On his return he accepted a position at the Naval Research Laboratory to set up a new program in molten electrochemistry including study of the electrodeposition of refractory compounds, such as carbides and silicides, from molten salts. At NRL he received a publications award twice, and was an NRL exchange scientist at the Materials Lab in Melbourne, Australia. His international reputation resulted in invitations to lecture at the Universities of Milan, Bologna, Ferrara, Pisa, Bari and Leeds, and in 1964 he gave a 2-week lecture tour in Romania, sponsored by the Romanian Government.

For 25 years concurrent with his research, he taught Physical Chemistry for the NIH graduate school. He was both secretary and President of the Washington Academy of Science and Chairman of the National Capital Chapter of the Electrochemical Society, and a recipient in 1971 of the Society's William Blum Award. He is a member of the Sigma Xi, the American Chemical Society, the Electrochemical Society, the Royal Society of Chemistry, and a fellow of AAAS and the Washington Academy of Sciences. Kurt has published over 100 papers and monographs, including some on the Liesegang phenomenon, and since his retirement he has edited and authored several chapters in Metallurgical and Ceramic Protective Coatings (1996, Chapman and Hall) and written High Temperature Properties and Thermal Decomposition of Inorganic Salts with Oxyanions (2001, CRC Press). As a composer, he has written more than 100 works for chamber ensembles, piano solo, choral and solo voice, and a Cantata, The Wanderer, for baritone, chorus, portative organ and medieval harp. Most of these works have been performed by professional musicians in the Washington area. A collection of some works, Chamber Music for Flute and Friends, was published by Bielizna Press. His interest in travel and the outdoors has included rafting the Colorado River, extensive backpacking and climbing Mt. Rainier, Longs Peak, Mt. Whitney and many of Colorado's 14,000 ft. peaks as well as the Gross Glockner in Austria. He has visited Machu Picchu and Antarctica and trekked in New Zealand and in the Himalayas in Nepal.

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Dr. Maurice Fried (74 years) Dr. Maurice Fried received his PhD in soil sciences from Purdue University in 1943. Following graduation, he started his career at the USDA in Beltsville, Maryland, where he did agricultural research. In 1959, Dr. Fried and his family relocated to Vienna, Austria, where he was the Section Head at the International Atomic Energy Agency on the application of isotopes and radiation to agriculture, where he remained until 1961. In 1961, still in Vienna, he became the Director of the Joint Food and Agricultural Organization of the United Nations. He remained in this position until 1983, when he and his family returned to the United States. In 1984, he was hired by the National Academy of Sciences, in Washington, D.C., to direct the Academy's research contract program involving Israeli, Palestinian and other Arab researchers. Dr. Fried retired in 2008. On November 6 of this year, he turned 98.

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Mr. Stephen M. Oleck (74 years) Born in 1919 to uneducated polish immigrants in Ansonia, CT, where I grew up and was educated in that school system. Did well and was accepted by the only college I could afford, which happened to be Yale where I received a BS in Chemical Engineering. My career started with about 4 years at Hercules Powder Co. in Wilmington, Dela., mostly on government projects related to the war effort. My next 6 years was at Baugh Chemical, developing a synthetic adsorbent for purifying sugar that included preparing a large batch of adsorbent for large scale testing at Revere Sugar Refinery in Boston. Our results were published in ACS's publication. I was then involved in planning and constructing a small manufacturing plant for the adsorbent. My next 30 plus years were at Mobil Oil's research lab in Paulsboro, NJ, where I was credited with almost 50 US patents for catalysts and their use in refining products. These included reforming catalysts for raising octane nunbers of naphtha, hydrocracking, desulfurizing demetallizing and dewaxing gas oils. My whole career was in research and development. I was one of the lucky guys who loved his job. After retiring from Mobil Oil in1984, I was involved for 4 years of discovery phase for a New York law firm that successfully sued another large oil company for violating Mobil patents. I then consulted for some years with other firms and finally ended my career with 2 years more for Mobil suing a manufacturer for royalties. I was 81 at that time.

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Mr. Robert Gumbinner (76 years) Mr. Robert Gumbinner will be fondly remembered as a Chemist, Chemical Engineer, Senior Executive, Husband, and Father. He was born in Yonkers, NY (9/15/19), lived most of his life in Tarrytown, NY, and resided in Asheville, NC, from 1994 until he moved to Springfield, VA in 2000. A brilliant man, he earned his Chemical Engineering degree with high honors from Cornell University in 1940 through hard work and scholarships. He was one of only 15 graduates, although over 125 started in the Chem. E. program. Having graduated High School two years early, Bob was one of the top 5 students in all of Westchester County, NY, thus earning him several scholarships and enabling him to attend Cornell. Bob contributed to world peace through his work on the Manhattan Project. Due to lung and eyesight issues, instead of serving in the military during WWII, he became part of the development team on the Manhattan Project. Working in various locations, although principally in Decateur, Illinois, he helped develop the tubes used for the gaseous diffusion separation of the fissionable Uranium 235 from the bulk Uranium 238. Bob held over 100 patents - most of them chemistry or process related to the graphics arts and printing industry. He started as a chemist and ultimately became the number 2 senior executive at Polychrome Corporation, a graphics arts, offset printing and stencil company, for 40 years where he grew the company from a startup to a NYSE listed company and the 4th largest employer in Yonkers NY.

Thereafter, he was a maverick in the impact investing world, until retirement in 1994, where he continued to stay very active touching many lives through numerous community and volunteer activities, including active involvement in the America Chemical Society of North Carolina and then of Washington, DC. Not only was Bob brilliant, he was also incredibly knowledgeable. Before the Internet, he was the place to go to get an answer to most questions. He was our Google search. On the personal side: Bob was an incredibly kind, thoughtful, patient, caring, soft spoken, and humble man. He was a true Gentleman.

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Mr. Patrick J. Hannan (77 years) Dr. Hannan was asked to be head of the Entertainment Committee of the CSW in about 1960. His term would begin roughly a year after his election, so he had time to study how the organization worked. Accordingly, he attended the Hillebrand Award dinner and was bored with the way it took place; each person seemed to be studying the wall paper while keeping an eye on the door in hope that someone he knew might show up. There was an answer to the problem, so at the next Award dinner there was an open bar where someone could buy a drink. The result was a doubling of the attendance. In addition to that, he changed the nature of the meetings which were held at the Cosmos Club. After the speaker had made his presentation, beer was served. This was a clumsy operation, so he began the custom of holding the meetings in a restaurant where a meal could be served before the evening's technical presentation. On the technical side, his principal work site was the Naval Research Laboratory which he enjoyed for 31 years, retiring in 1987. Shortly after the Navy received its first nuclear submarine (*Nautilus*), the problem of maintaining a habitable atmosphere in the sub while it was submerged was of major interest. Normally, when the diesel-powered submarines were in operation, they had to depend on battery power when they were submerged. During that time, oxygen was provided by the electrolysis of seawater, and CO_2 was removed by monoethanolamine. These systems worked but a number of industrial and academic organizations urged the Navy to try a back-to-nature movement in which an algal culture, by photosynthesis, would remove the CO_2 from the atmosphere and produce oxygen. The Office of Naval Research demanded that NRL do such a study. The problem was that none of the 3500 people had any knowledge of algae. For reasons unknown to him, he was assigned the task, though he had never seen an alga. Although there were many false starts made by me, with the cooperation of some great technicians (glassblowers, machinists, plastics experts) he was able to construct an apparatus that fit the bill. In a 3-year study, with two assistants, it was shown that the system worked well. When operated totally automatically for a week, the culture required several days to come to equilibrium but for the last two days of the week the Standard Deviation of the oxygen production was only 0.75 %. So the system worked! The problem was with the electrical power required by the Lights. If there were 100 men on board, the electrical power required for one day would be equal to that of a three-bedroom house for three months. Clearly, that was not practical. However, in a study made by Lockheed Aircraft, of the 16 studies conducted in the U.S., the one at NRL was clearly the most productive. That was gratifying.

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