

National ACS Leaders from the Northeastern Section

Reprinted from the June 1973 NUCLEUS, by Edward R. Atkinson, the more recent period covered by the editor

Our account is limited to those chemists and chemical engineers who, as members of the Section, filled important ACS offices at the national level. If time and space permitted we would enjoy telling about the contributions of many other members who have served on the many committees of the ACS Council or who have performed many special tasks for the Society.

In considering section members who have been elected presidents of the ACS we want to cheat a little and start with Thomas Sterry Hunt who served the infant Society for two separate terms (1879 and 1888) in the days before there was a Northeastern Section. Hunt was born in Norwich, Connecticut in 1826, was a student of the elder Silliman at Yale, and was a chemist and mineralogist with the Geological Survey of Canada until 1872. During that time he was a founder of Laval University and taught chemistry there and at McGill University. He succeeded William Barton Rogers (the founder of M.I.T.) as professor of geology at the Institute and later resigned the position to enter consulting work. He was not only president of the ACS but also of the AAAS (1871) and was a Fellow of the Royal Society. Organic chemists remember Hunt as the first American chemist to define their science as the chemistry of compounds of carbon, and as the originator of a Type Theory (1854) that in some respects anticipated that of Williamson and Gerhardt. Hunt's chemical philosophy was summarized in his book "A New Basis for Chemistry" first published in 1887 and translated into French and Russian. His philosophy was characterized by a denial of the atomic-molecular hypothesis first applied to chemistry a hundred years earlier by William Higgins and John Dalton. If readers are shocked to learn that an ACS president refused to accept atomic theory they should be told that there remains today [i.e. in 1973, ed.] a reasonable number of Section members who, in their college days, were told that ions were fads.

From its very start the Northeastern Section has been one of the largest and most active ACS sections. It is no surprise to learn that it has contributed a distinguished series of ACS presidents during the past 75 years.

Arthur Amos Noyes (1904) was born in Newburyport to a family dating back to 1635 in that town. He graduated from M.I.T. in 1886, having done his freshman year work at home because of the cost of studying at Cambridge. After obtaining the Ph.D. with Ostwald (1890) he returned to M.I.T. and was a full professor at the age of 33 (1899). He was Acting-President at the Institute in 1907-1909 and became Director of the Gates laboratory at Caltech in 1915 where he remained until his death in 1936. During the first years at Caltech he also retained his professorship at M.I.T. Among famous chemists who were stimulated by their early association with Noyes were G.N. Lewis, W.R. Whitney, C.S. Hudson, C.A. Kraus, F.G. Keyes, and Linus Pauling; there were many others. Noyes was the author of the famous "Qualitative Chemical Analysis" which went through many editions. With Myles Sherrill he was the author of the famous (infamous?) "Chemical Principles" from which generations of chemists acquired a fundamental understanding of

physical chemistry. I personally used the last edition, which was prepared by its author during sabbatical leaves in Hawaii (1931). Revised chapters were shipped back to Cambridge, run off on a mimeograph machine, and fed to M.I.T. chemistry majors by Jim Beattie. The chemical engineering majors used the simpler text of Earl Millard, which at least had a hard cover. The Noyes and Sherrill expression "it is obvious" required at least a day or two to understand; "a little consideration will show" took a week or so; "the principle is illustrated in the following problems" never was understood by about half the class. A notable ACS activity not recognized by many was Noyes' publication during 1895-1901 of "Review of American Chemical Research" which he carried out in order to improve the rather shoddy coverage then supplied by the "Chemisches Zentralblatt." The publication was continued in what is now the "Technology Review" and then became "Chemical Abstracts" in 1907. Because the "other" Noyes (William Albert Noyes, Sr.), who was editor of the Journal of the ACS, was in charge of the establishment of CA, the early contribution of Arthur Amos is often overlooked.

[Added in 1998:] For a more complete biography of A.A. Noyes, see The NUCLEUS, 1997, LXXV (10), 11 (Summer), written by David L. Adams.

Arthur Dehon Little (1912-1913) was born in Boston in 1863 and died in Maine in 1935. He graduated from M.I.T. in 1885 and then founded the first industrial consulting firm in the United States with R.B. Griffin in 1886. Following Griffin's death in a laboratory accident (1893), Little continued the work alone until joined by William A. Walker in 1900. Arthur D. Little, Inc. was established in 1909, and was brought to prominence throughout Little's life. His contributions to industry were many, particularly in the fields of pulp and paper and synthetic fibers. With Wallace Murray and Gustavus Esselen he made the famous "silk purse from a sow's ear", which is now enshrined in the Smithsonian in Washington. He was considered by some as a chemical engineer. He was president of the American Institute of Chemical Engineers in 1919 and the Society of Chemical Industry in 1928-1929. He received the Perkin Medal of the ACS in 1931, as well as many honorary degrees. His essay "The Fifth Estate" was quoted in detail in "Chemical and Engineering News" just last year [i.e. in 1973, ed]. I recall that Dr. Little in person was fully as impressive a man as he appears in his portrait that hangs in the lobby of the Cambridge firm that bears his name.

Our next two presidents, Theodore William Richards (1914) and James Flack Norris (1925-26) will be the subject of special parts of this history, to be published later in the year.

[For more recent biographies of Richards, see The NUCLEUS, 1996, LXXIV (7), 4,7 and 1998, LXXXVI (7), 4-6, "Who was Theodore William Richards" by M. S. Simon]

Arthur Becket Lamb (1933) was a native of Attleboro, Mass. (1880). He majored in biology at Tufts (A.B. and A.M. 1900) but came under the influence of Arthur Michael, who lured him into chemistry. Lamb's graduate work was carried out both at Tufts and at Harvard, where he was a student of T.W. Richards and G.P. Baxter, and he received the

Ph.D. from each school, although Harvard had some reservations about the propriety of such an action. Lamb served as ACS President at the half-way point in a 30-year term as editor of the "Journal of the American Chemical Society" (1918-1949). In those days JACS was certainly the most prestigious ACS primary journal and it stands as a living memorial to him. He was fortunate to have Allen Douglass Bliss (Harvard, Simmons) as a managing editor, so that he could devote his major effort to the consideration of manuscripts. As a result of this work he spoke with authority on the quality of research being carried out in the laboratories of universities, government and industry. Lamb had a dry sense of humor and a way with words, both of which he used effectively in his editorial work. From 1949 until his death in 1952 he assisted the new JACS editor, W. Albert Noyes, Jr. An entire issue of JACS was published as a memorial (J. Amer. Chem. Soc., 77, (22), 5773 (1955)). It contains a portrait of Lamb and an excellent biography written by Doug Bliss. All articles in the issue were by authors who studied at Harvard.

Bradley Dewey (1946) was born at Burlington, Vermont in 1887, the son of Davis R. Dewey, who taught economics at M.I.T. for 56 years, and a nephew of the famous philosopher-educator John Dewey. His undergraduate work was done at Harvard (1908) and M.I.T. (1909). During World War I he served in the Chemical Warfare Service, for which he received the Distinguished Service Medal. In 1919 he joined with Charles Almy to found the Dewey and Almy Chemical Co. (since 1952 a division of W.R. Grace). D&A became one of the leading chemical industries in New England. Its primary product was a water-base latex sealing compound for cans, and production units were established all over the world to support the process food industry. The company's interest spread to elastomers in general, particularly to the design and manufacture of polymers that were tailor-made for specific applications. With the coming of World War II Dewey already was an expert on styrene-butadiene copolymers and so became associated with the synthetic rubber program. In 1943 he succeeded Donald Nelson in the Office of Rubber Director and remained there until the end of the war. Margie Hart, the famous strip-tease artist, cooed "Take it off, take it off for Bradley Dewey," as she slipped off her rubber girdle.

Dewey's first job as ACS President was to preside over a 3-day meeting of the ACS Council at Atlantic City during which the Constitution and Bylaws of the Society were revised completely. He was convinced that chemists and other scientists should play an active role in community affairs and ran successfully for the Cambridge School Committee. Following his retirement from Dewey and Almy in the early 1950s he successively founded both the Bradley Container Co. (Maynard, Mass.) and the Hampshire Chemical Co. (Nashua, N.H.). He was the recipient of many honorary degrees and today [i.e. in 1973] lives in retirement, an honored member of the Northeastern Section.

Arthur Clay Cope (1961) was born in 1909 and came to our section in 1945 when he became head of the chemistry department at M.I.T., an office he held until 1965 when he became the first Dreyfus Professor of Chemistry at the Institute. During his 35 years of professional life he contributed over 200 papers describing his research in organic chemistry. His influence on chemistry at M.I.T. was revolutionary, to say the least.

Graduates came to refer to themselves as being B.C. (before Cope) or A.C. (after Cope). He was a member of the ACS Board of Directors for 16 years and was Chairman of the Board from 1959 until his death on June 4, 1966, with the exception of 1961 when he served as ACS president. Art's contributions to the Northeastern Section were many. In the early 1950s he was chairman of the "Cope Committee" which studied the activities of the section and recommended a variety of changes, most of which were adopted. He was chairman of the section in 1955. That year I served as Chairman-elect and had charge of the program committee. So great was Art's reputation that I had little trouble in acquiring the services of outstanding speakers. His attention to the detail of section operation was meticulous, despite his many other tasks. He was the recipient of many honors and has recently been honored by the establishment of a national ACS award in his memory.

Charles Lathrop Parsons became Secretary and Business Manager of the American Chemical Society in 1907, when the Society was composed of 3000 members, and retired at the end of 1945 when it had grown to 43,000 members. At that time over 99% of the current membership had known no other Secretary and Charlie was certainly better known to the membership than any of the presidents under whom he had served. He was known here and abroad as "Mr. ACS."

Charlie joined the ACS in 1893 when he was in charge of chemistry at New Hampshire College, now the University of New Hampshire. He ran the office of secretary from Durham beginning in 1907 when W.A. Noyes, Sr. gave up the job to found "Chemical Abstracts." He left the section for Washington in 1912, but never lost his affection for, and interest in, New Hampshire. His grandson learned his chemistry there, and Charlie was honored by having the modern quarters of the chemistry department named Parsons Hall

Parsons had what can only be described as a fierce concern for the professional status of chemists and for the ACS. During World War I he concerned himself with the proper application of chemical and chemical engineering talent to the problems of the nation. When World War II approached he was aware that there was no reasonable place for chemists and chemical engineers in the armed forces and he waged a vigorous personal campaign to see to it that the many Society members who held commissions in the reserves resign those commissions before entering active duty. His arguments were convincing to the Washington brass and many of us were allowed to resign even after Pearl Harbor. Many of those who did not, as well as chemists who joined the Chemical Corps from civilian life, had frustrating experiences during the balance of the conflict.

Charlie's concern for the CAS can be illustrated by a single example. At a national meeting held in Boston in September 1939 (just as World War II started) Bill Pierce and I were in charge of the then fledgling Employment Clearing House operated for the benefit of unemployed chemists and chemical engineers, of whom there were still many. Registration was limited to ACS members registered at the meeting. When almost indigent chemists came to Bill and me and indicated that they could not afford the registration fee, we stretched the regulations a bit and arranged for a few interviews with

prospective employers. Charlie found out what we were up to and almost blew his stack. He gave Bill and me a long lecture about how the country was filled with chiselers, who gladly would use the ACS services without paying for them.

When Charlie retired he was given a testimonial banquet at Atlantic City in April 1946. Those of us who attended it will never forget it; for details see "Chem. Eng. News", April 25, 1946. There will never be another Charlie Parsons! Even as early as 1932 Marston T. Bogert said, "Having closely followed the progress of our Society for the past forty years I say unhesitatingly and without fear of successful contradiction that what the American Chemical Society is today it owes more to Charles Lathrop Parsons than to any other American chemist."

Gustavus J. Esselen, Henry A. Hill and John C. Sheehan have served or are now [1973] serving as members of the ACS Board of Directors, where each has distinguished himself for his services to the ACS. We hope to tell you more about these members in a subsequent installment of this series.

Henry A. Hill went on to become ACS President in 1976. After his untimely death in 1979 he was remembered by the establishment of two Henry A. Hill Awards (one by our section to honor section members for their outstanding contribution to the Northeastern Section is awarded annually, the other, an award by the ACS Council Committee on Professional Relations). In addition, there is a Henry A. Hill Lectureship, sponsored jointly by the Northeastern Section and the National Organization for the Advancement of Black Chemists and Chemical Engineers. For a biography of Henry A. Hill, see *The NUCLEUS*, 1997, LXXVI (2), 4 (October) and for a personal remembrance, delivered by his son Anthony Cromwell Hill on the occasion of the 16th Henry A. Hill Award on October 12, 1995: *The NUCLEUS* 1995, LXXIV (4), 10 (December).

Michael E. Strem who chaired the Section in 1989, has been elected to the ACS Board of Directors, as Director of Region I, the Region in which our Section is located, for a three year term, starting 1998. Dr. Strem, until his election as Director, was also a Councilor for the ACS Division of Small Chemical Businesses.