A BRIEF HISTORY OF THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY ON ITS 125TH ANNIVERSARY

The New York Section was chartered on September 30, 1891, as the second local section of the American Chemical Society. From 1876, when the society itself was founded, until 1891, the society itself was very much a New York organization. The society was founded on April 6, 1876 in the lecture room of the College of Pharmacy of the City of New York, now New York University. The society was incorporated in the State of New York in 1877, and its Charter required that its Board of Directors, the legal representatives of the society, to be residents of New York State. The society would remain so until 1938, when it received its Federal Charter, and moved its official headquarters to Washington D.C. It is not surprising that most of the early members of the society, and all of its scientific meetings were held in New York City.

It was the localization of the society in New York that eventually led to the need to form local sections. During the years 1876 to 1890, the society failed to develop an active membership outside of New York City. Out of State members, plagued by the inconvenience of travel and lack of regular mail delivery soon became disillusioned, and began to resign. The membership, which had reached a high of 243 in 1881, declined to 167 in 1889. Dissident members, such as Harvey Wiley and Frank W. Clarke, formed the Washington Chemical Society in 1884, thus bringing pressure on the ACS for needed reform. In addition, Charles F. Chandler, Professor of Chemistry at Columbia in New York City, and Charles F. Monroe of Rhode Island, worked within the society to make it into a truly national chemical society. The result of these efforts led to a new constitution, which was adopted on June 6, 1890, providing for meetings outside of the New York City area, and also for the formation of local sections of the society. The first general meeting under the new constitution took place in Newport, Rhode Island in August 1890. In January 1891, the society approved the formation of the Rhode Island Section as its first local section. New York received its charter in September 1891 as the second local section of the society.

Early History of the New York Section

The twenty chemists who made application for the formation of the New York Section constitute the charter members of the section. Among this group were two past presidents of the ACS, Charles F. Chandler and T. Sterry Hunt, and three future section chairs, A. A. Breneman, C. A. Doremus, and A. H. Sabin. Charter members also included Albert K. Leeds, Herman Endemann, and Albert C. Hale, men who distinguished themselves through long and dedicated service to the society.

The first elected officers of the section were Alvah H. Sabin as Chairperson, Morris Loeb as secretary/treasurer, and an executive committee consisting of **Henry Carrington Bolton**, Abram A. Breneman, and William McMurtrie. Space only permits brief mention of the accomplishments of several of these distinguished chemists.

Alvah Sabin spent most of his career with the American Lead Company, and was an expert in drying oils and the technology of paints, varnishes, and lacquers, and, for 30 years, was an abstracter for Chemical Abstracts in these fields.

Morris Loeb served as secretary/treasurer from 1892 to 1895, and also was the section chair in 1909-10. Loeb studied under the great physical chemist Wilhelm Ostwald, and was one of the pioneers in America in this new field of science. A philanthropist, Loeb donated the land for the original Chemists' Club building on East 41sr Street in Manhattan, and made possible, in 1912, the Wolcott Gibbs Laboratory for Physical Chemistry at Harvard.

William McMurtrie served on the first executive committee and also as section chair from 1896 to 1899. McMurtrie was the first of six New York Section chairs who would serve as President of the American Chemical Society. He worked as chief chemist for the departure of Agriculture, and, in 1883, was succeeded by Harvey W. Wiley, whose great work led to the Pure Food and Drug Act of 1906.

Henry Carrington Bolton, also a member of the first executive committee, was regarded as one of the leading scientists in America at that time. Author, lecturer and bibliophile, it was Bolton who suggested that chemists meet in in 1874 to celebrate the 100th anniversary of Joseph Priestley's discovery of oxygen. This is generally considered to be the first National meeting of chemists held in the United States. Bolton's legacy lives on today through the Bolton Society of the Chemical Heritage Foundation, a group of bibliophiles devoted to the discussion and preservation of books and related printed material devoted to chemistry and related sciences.

Many other prominent chemists served as chairpersons of the section over its 125-year history. Of the chemists who serves as section chairpersons, six would serve as President of the ACS, five would be awarded the Nichols Medal, two would receive the Priestley medal (Marsten Bogert and Louis Hammett), and one the Nobel Prize in Chemistry. Vincent Du Vigneaud, of Cornell Medical College, who was chair in 1943 and received the Nobel prize in 1955 for the isolation and synthesis of the cyclic peptide, oxytocin. It was not until 1946 that the first woman was elected chair of the Section. Her name was Dr. Cornelia T. Snell, who, along with her husband, operated Foster D. Snell Inc., consulting chemists and chemical engineers of Brooklyn NY. Dr. Snell and her husband wrote several volumes on inorganic chemistry.

The first regular meeting of the New York Section was held on May 6, 1892, and the first paper presented was "On the Application of Graphic Methods in Certain Chemical Studies" by A. Bourgougnon. Over the next hundred and twenty-five years, many distinguished chemists would present the results of their research at meetings of the section.

The William H. Nichols Medal Award

In 1902, William H. Nichols, a charter member of the ACS and President in 1918 and 1919, established an award for the purpose of encouraging original research in chemistry. Dr. Nichols, himself a pioneer in the development of the chemical industry in the United States, was among the first to realize the importance of encouraging chemical research in America. The William H. Nichols Medal Award, the oldest award presented by a local section of the ACS, recognizes outstanding achievement in chemical research. To date, eighteen recipients of the Nichols Medal have also received the Nobel Prize, the most recent being K. Barry Sharpless, who received the Nobel in 2001 and the Nichols in 2006. Five NY Section chairs have been awarded the Nichols Medal, namely Marsten T. Bogert (1906), Leo H. Baekland (1910), Henry C. Sherman (1934), Vincent Du Vigneaud (1945), and Louis P. Hammett (1957).

Some Memorable Meetings of the New York Section

Many memorable meetings have taken place in New York City during the section's one hundred and twenty-five year history. Among the most significant were the ACS National Meetings hosted by the section, commemorating the 25th, 75th, and 100th anniversaries of the society. The 125th anniversary of the society was celebrated with a National Historic Chemical Landmark in New York in 2001.

Several meetings were of historical significance. Among these was a 1914 Conference on Chemical and Dyestuffs, which called attention to the U.S. dependence on imported chemicals and the need for American chemical companies to expand into dyestuffs, pharmaceuticals, and other organic chemicals. ACS President Charles Herty, a former NY Section Chair, took action to mobilize American manufacturing resources in the interest of industrial preparedness. In general, the usefulness of the Society to government in the war effort was greatly enlarged. In 1918, while Herty was serving as section chair, he also served as chair of the ACS Press and Publicity Committee, which he leveraged to turn into the ACS News Service. The News Service began publishing the *Chemical & Engineering News* in 1924.

Among the innovations associated with the New York Section are the formation of the Chemists' Club; the establishment of the William H. Nichols Medal Award; the ACS News Service; local section historic chemical landmarks; and the concept of its meetings-in-miniature, now called the Undergraduate Research Symposium, now in its 64th year.

National Historic Chemical Landmarks.

In 1993, the ACS Division of Public Outreach and the Division of the History of Chemistry sponsored a new program to increase public awareness among professionals and the general public of historic chemical and chemical engineering sites, artifacts, and collections and to encourage their preservation. More information on the National Historic Chemical landmark Program may be found at:

www.acs.org/content/acs/en/education/whatischemistry/landmarks.html

Of the almost 100 designations that have taken place so far, seven have been associated with the New York Section. These landmarks are indicated below:

1993 - The Bakelizer – (Landmark #1, jointly with the North Jersey Section)

1998 - Havemeyer Hall, Columbia University

2000 - The Chemistry of Life; Nucleic Acids and Proteins at Rockefeller University

2001 - John W. Draper and the Founding of the ACS

2003 – The Polymer Research Institute

2008 - Development of Deep-Tank Fermentation

2011 - NMR and MRI: Applications in Chemistry and Medicine

New York Section Historic Chemical Landmarks

Not all historic sites meet the criteria of the National Historic Chemical Landmarks Program. For that reason, the New York Section, in 2006, instituted the NY Section Historic Chemical Landmarks Program. To date, four groups have been given this designation

2006 - The Chemists' Club

2007 - IBM Thomas J. Watson Research Center

2012 - The Chemistry Department at Brookhaven National Laboratory

2015 – The New York Hall of Science

The New York Section – Recent History

The territory of the Section has changed greatly compared to 125 years ago, when membership included those members within a 50-mile radius of New York City Hall. The most dramatic change occurred in 1925 when the North Jersey Section was chartered. In 1926, the North Jersey and New York local sections joined forces with the publication of *The Indicator*, which continues publication to this day.

The Nichols Foundation Chemistry Teacher Award, established in 1958, was made possible through the generosity of Charles W. Nichols, Jr., grandson of William H. Nichols. The purpose of the award is to encourage and stimulate good teaching of chemistry and to recognize dedicated teachers who inspire students to fully utilize their intellectual resources. The section continues to support education at all levels through its participation in activities such as the Chemistry Olympiad, Project SEED, and National Chemistry Day.

Today, the New York Section, through its six subsections, fifteen topical discussion groups and committees, provides its more than 4000 members over 100 technical events each year. The section continues its proud tradition of service in the advancement of the chemical sciences initiated by its charter members 125 years ago.

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