CHAPTER V

THE ACTIVITIES OF THE AMERICAN CHEMICAL SOCIETY

BY CHARLES L. PARSONS

History

In a volume commemorating the Twenty-fifth Anniversary of the AMERICAN CHEMICAL SOCIETY, printed in 1902 as a Supplement to THE JOURNAL, appears a detailed history of the first twenty-five years of the SOCIETY, by Albert C. Hale, for many years its efficient Secretary.

The petition of a group of chemists to form a subsection of chemistry in the American Association for the Advancement of Science at Portland, Maine, in August, 1873, and a gathering of chemists which met at Northumberland, Pennsylvania, at the former home and final resting place of Joseph Priestley, on August 1, 1874 (the one hundredth anniversary of his discovery of oxygen), were indications of a growing desire upon the part of American chemists to meet together at occasional intervals. A number of those who participated in these gatherings felt, however, that a separate and entirely independent organization of American chemists should be established. At a formal meeting held in New York, at the home of C. F. Chandler on January 22, 1876, a committee was formed which sent out a circular letter suggesting the establishment of such an organization. The response was so gratifying that it was determined to form a national, instead of a local, society.

Following further communications with the chemists of the country an organization meeting was held on April 6, 1876, at the old New York University Building, New York City, over which Professor Chandler presided, with Isidor Walz as Secretary. After full discussion, the meeting adjourned until April 20. On that date, the AMERICAN CHEMICAL SOCIETY was definitely organized and officers elected. John W. Draper was elected its first President, and the names of fifty-three resident and eighty

non-resident chemists appear as charter members. Its first Constitution and By-Laws were adopted on that date. Of those original one hundred and eighty-three members, four, namely, J. B. F. Herreshoff, Charles E. Munroe, Wm. H. Nichols, and H. E. Niese, have maintained an unbroken connection with the SOCIETY throughout its fifty years. Two other members, S. A. Goldschmidt and Adolph Kuttroff, have also been with the SOCIETY fifty years, but they were not present at the first meeting.

Although the SOCIETY started nominally as a national organization, its meetings were so local in character, being confined to New York City, that there was little evidence of general support from American chemists until fifteen years later, when it became truly national in scope. The SOCIETY was chartered as a non-profit, non-stock corporation of the State of New York, on November 9, 1877. Its Directors could be elected only from citizens of New York state in which all business of the SOCIETY had to be transacted. Owing to this fact, and to the circumstance that the meetings were held wholly within New York City, the impression was produced upon non-resident chemists that the SOCIETY was local, rather than national, in its character and aims. Non-resident members did not come into such active intimate relations with the SOCIETY as was desirable, and accordingly there was little growth during the first years after its organization.

In 1890 an attempt was made to start another society of chemists which should be more national in character, but this appeal was met by the argument that the AMERICAN CHEMICAL SOCIETY, although small in numbers, had already acquired actual recognition and prestige, that its name and charter had a national significance, and that changes could be made in its organization which would command the active support of the great body of American chemists. As a result, a general conference was held in Washington on August 17, 1891, which was attended by delegates representing chemical societies from various sections of the country. A general plan of procedure was outlined; a new Constitution and By-Laws were proposed; a special law was drawn up and later (1895) passed in New York state which permitted the Directors of the SOCIETY to be elected without restrictions as to residence and place of meeting. After numerous conferences a complete reorganization was effected, a final report was made, and a new Constitution was adopted on November 4, 1892. Although this Constitution was an improvement over any which had preceded, it was still found to be imperfect, and another was adopted on December 2, 1897. Corresponding By-Laws went into effect on April 12, 1898.

Every step taken had been one of progress toward a truly national organization and the chemists of the country began rapidly to realize that without reference to residence they had a real part in the SOCIETY and its future. This feeling had been particularly encouraged by the new policy of holding general meetings and transacting business in numerous chemical centers. The formation of local sections, which held regular meetings, had especially fostered among chemists a feeling of broad general interest. The first of these was established at Providence, Rhode Island, January 21, 1891, and thirteen local sections were in actual operation at the time of the SOCIETY'S Twenty-fifth Anniversary.

In January, 1893, the Board of Directors accepted the proposition of Edward Hart to suspend his *Journal of Analytical and Applied Chemistry* and to take over the publication and editing of the *Journal of the American Chemical Society*. This was an important advance toward unifying the country's chemical publications, and Dr. Hart continued as editor of the SOCIETY'S JOURNAL until 1902. The editing of THE JOURNAL between 1884 and 1893 had been ably performed by A. A. Breneman who, without recompense, devoted much of his time and energy during this uncertain period to keeping the SOCIETY alive.

In 1896 an arrangement was made with Section C of the American Association for the Advancement of Science whereby the summer meetings of the two organizations of chemists were held at the same place in the same week, the first two days being given to the sessions of the AMERICAN CHEMICAL SOCIETY and the remainder to those of Section C. This arrangement continued for many years, until 1912, when circumstances necessitated its discontinuance. The AMERICAN CHEMICAL SOCIETY had then grown to such numbers that the difficulty of finding adequate meeting places obliged the two organizations, much against their will, to meet again separately. The AMERICAN CHEMICAL SOCIETY has, however, always coöperated with the American Association for the Advancement of Science, and its President and Secretary are still ex-officio members of the Council of the Association. At the end of its first twenty-five years, the SOCIETY had 1933 members, of whom 1281 were registered in local sections.

The concluding second half-century of the AMERICAN CHEMICAL SOCIETY has been a period of continued growth in membership, influence, service, and prestige. It is the largest scientific organization in the world devoted to the interests of a single science. Its membership is three times that of any other chemical organization, and its contributions to chemical literature, the most voluminous

of their kind, are excelled in quality by none. The principal activities and the important developments of the AMERICAN CHEMICAL SOCIETY must be considered separately in order to be fully understood.

Publications

The advancement of chemical knowledge and the recording of chemical research and chemical practice have been the chief aim and the greatest accomplishment of the AMERICAN CHEMICAL SOCIETY. It publishes three journals, the *Journal of the American Chemical Society*, *Chemical Abstracts*, and *Industrial and Engineering Chemistry*, which are sent to all members of the SOCIETY and to many non-member subscribers. These three journals are supplied to all members of the SOCIETY without other payment than their membership dues. In their respective fields they contain more material and touch the chemical horizon more completely than any similar publications. On account of the size of their subscription lists, which exceed those of any other chemical journals, and the consequent reduction in expenses of publication, the three journals are supplied to members of the SOCIETY for about one-half the cost of any similar choice of publications in any language.

In addition to its journals, the AMERICAN CHEMICAL SOCIETY publishes two series of chemical books, one scientific, and the other technical, each with distinct editorial boards; *Chemical Reviews*, published quarterly under the auspices and editorial control of the SOCIETY; and the *Journal of Chemical Education*, published monthly by the SOCIETY'S Division of Chemical Education. These are supplied to members and non-members at a nominal cost. The *Journal of Physical Chemistry* is published under the joint auspices of the AMERICAN CHEMICAL SOCIETY, the Chemical Society (London), and the Faraday Society.

JOURNAL OF THE AMERICAN CHEMICAL SOCIETY.—Immediately upon the organization of the AMERICAN CHEMICAL SOCIETY, arrangements were made with the editors of the *American Chemist*, which was established by Charles F. Chandler in 1870, and continued until 1877, to print the Proceedings of the SOCIETY in his journal. They were also issued as separate reprints to the members of the SOCIETY during 1876–1878, and formed the first two volumes of the SOCIETY'S publication under the heading, "Proceedings of the American Chemical Society, Volume 1 and Volume 2."

The *Journal of the American Chemical Society* appeared first in

1879 as an independent monthly publication. Not always during the next fifteen years was it possible to issue twelve numbers annually, but a volume was issued each year, and beginning with 1893 monthly issues have appeared to date, THE JOURNAL constantly growing in size and in quality. At the end of forty-eight years, THE JOURNAL carries annually 3300 pages of chemical research, chiefly in the fields of general, physical, inorganic, organic, and biological chemistry. Most of the contributions to pure chemistry, published in America, appear in its pages.

In addition to these records of research, THE JOURNAL contains the Proceedings of the SOCIETY and numerous reviews of books on pure chemistry and related subjects. With it, in 1897, was incorporated the *Review of American Chemical Research*, a predecessor of *Chemical Abstracts*, the first two volumes of which had already appeared as a part of the *Technology (Massachusetts) Quarterly*, of which Arthur A. Noyes was editor. It was discontinued at the end of the year 1906, *Chemical Abstracts* becoming its worthy successor. In 1914, the *American Chemical Journal*, founded and edited by Ira Remsen, was incorporated with the *Journal of the American Chemical Society*. Complete sets of THE JOURNAL are almost unprocurable.

CHEMICAL ABSTRACTS.—In January, 1907, the AMERICAN CHEMICAL SOCIETY, then having 3300 members, began the publication of *Chemical Abstracts*. The growth of chemical literature had become so great that a comprehensive abstract journal was an absolute necessity, if English-speaking chemists were to keep abreast with the chemical research of the world and to compete with the preponderant position which Germany, at that time, had gained in chemical development. *Chemical Abstracts* was established with the avowed purpose of publishing adequate abstracts of all papers of scientific and industrial chemical interest appearing throughout the world, regardless of the language in which they were printed. It has accomplished this object with a high degree of efficiency. The literature of chemistry has, however, been growing so steadily in recent years that it has become increasingly difficult to give it adequate treatment within the space limitations which the AMERICAN CHEMICAL SOCIETY'S more slowly growing income imposes. The extent of this growth of literature is shown by the following figures, which give the number of abstracts published in the past eight years:

Year	1918	1919	1920	1921	1922	1923	1924	1925
Number of abstracts	13,357	14,696	18,051	19,476	23,212	24,256	25,607	26,426

In order to continue the important policy of completeness it has been necessary, for keeping within limits, to reduce the length of abstracts. The amount of reduction is shown by figures for the average length of abstracts of papers and of patents, which follow. The unit is a page.

Year	1917	1918	1919	1920	1921	1922
Abstracts of papers	0.251	0.220	0.244	0.223	0.218	0.190
Abstracts of patents	0.108	0.099	0.115	0.107	0.098	0.086

In 1923 it became necessary to use solid composition and make other space economies so that a comparison for 1923–1925 with the period 1917–1922 is impossible. Even further reductions in the length of abstracts was necessary and, in order to save expense, use is made of every possible method of abbreviation. In spite of this drastic condensation, the 26,426 abstracts in *Chemical Abstracts* for 1925, with index, covered 4773 pages of 8-point solid composition.

Starting with an initial expenditure of only $11,606.60 in 1907, the costs of publishing *Chemical Abstracts* have continually increased until in 1925 they exceeded $100,000, which is about 35 per cent of the total expenditure of the SOCIETY.

In order that *Chemical Abstracts* may be made more useful to individuals without extensive library facilities, a list of American libraries and of the chemical journals to which they subscribe has been compiled and directions are given as to the method of procuring photographic copies of original articles and also, if necessary, of translations. In order that its influence may be as international as possible, advance galley proofs of abstracts are exchanged with the Society of Chemical Industry and the Chemical Society (London). The subscription rates of *Chemical Abstracts* are lower than what other far less complete abstract journals are obliged to require. This, and all the other journals of the AMERICAN CHEMICAL SOCIETY, are now found in all of the important libraries of the world.

While *Chemical Abstracts* has been the greatest asset of the AMERICAN CHEMICAL SOCIETY in disseminating the results of research, it has also been its greatest financial burden, owing to the curve in the productivity of chemical research rising more rapidly than the curve of the present income from American chemists. It is confidently expected that means will be found to continue and enlarge both the scope and usefulness of this important journal without increasing its cost to the chemists of the world.

In preparing chemical abstracts, each individual review is written by a chemist who is a specialist in the particular field involved. The quality of the abstracts is further safeguarded by

the editorial supervision of men of high standing in their branches of chemistry, who serve as assistant editors, one or more being in charge of each of the thirty sections into which the abstracts are classified. Special attention is given to the indexing, particularly the subject index. The official index number with its separate author, subject, and formula indexes can be used with confidence as a key to the whole literature of chemistry for the period covered.

A collective index to the first ten volumes (1907–1916) of *Chemical Abstracts* has been published, consisting of two volumes, containing 1980 pages, devoted to authors; and two volumes, containing 2843 pages, devoted to subjects. A second Decennial Index covering the years 1917–1926 is in preparation and will be issued shortly. Its magnitude can be gauged somewhat by the estimate that the 3500 copies of seven volumes each to be printed will cost the SOCIETY in the neighborhood of $100,000.

Chemical Abstracts is published semimonthly and has much the largest circulation of any scientific abstract journal in the world.

INDUSTRIAL AND ENGINEERING CHEMISTRY.—This journal began publication in 1909 and has become a power in the industrial and engineering field. It is the one journal of the AMERICAN CHEMICAL SOCIETY which is financially remunerative, yielding through its advertisements a net income of approximately $70,000 a year, which has enabled the SOCIETY to publish, at a reduced cost to its members, the *Journal of the American Chemical Society* and *Chemical Abstracts*. The Industrial Journal was established to meet the demand of the industrial and engineering chemists of America shortly after the adoption by the SOCIETY of the divisional organization, which has proved so helpful in its growth and welfare.

Industrial and Engineering Chemistry, as its name implies, covers the broad field of the application of chemical science. In its columns are found contributions from the laboratories of practically every university and industrial research organization in America. This material covers a wide range of subjects, such as dyes and textiles, the metals, leather, cellulose, rubber, fertilizers, petroleum, gas and fuel, agriculture and food, medicinal products, sanitation, etc. Many papers are written from the engineering point of view; others discuss the industrial application of discoveries in pure science; while a third group deals with analytical processes or new laboratory apparatus. From time to time other features appear, such as statistical surveys of the chemical industries of this and other countries, summaries of the progress of chemistry in many industrial fields, or special articles and bibliographies by writers expert in the subjects treated. Government

publications in the technical field, reviews of new books, and chemical market conditions are summarized. A special feature of *Industrial and Engineering Chemistry* is the editorial section.

In 1922 a proposal was presented to the Directors of the SOCIETY to publish *Industrial and Engineering Chemistry* in three parts, two of them to be simply a popular news edition. This was favorably considered and the News Edition was accordingly begun with the January issue of 1923. While the Industrial Journal itself appears on the first of the month, the semimonthly issues of the News Edition appear on the tenth and twentieth.

The News Edition publishes reports of scientific meetings, general news items, notes from the industrial field, changes in business connection, personal notes, and construction news. It carries also employment information for the members, and letters from correspondents in Canada, England, France, Germany, Italy, Japan, Norway, and other foreign countries. As it keeps the membership abreast of the times, it has, as was anticipated, supplied an important demand.

CHEMICAL MONOGRAPHS.—As a result of the report of a committee on compendia of chemical literature, presented at the general meeting of the SOCIETY in Buffalo, New York, in 1919, the AMERICAN CHEMICAL SOCIETY undertook, at the end of that year, the publication of two series of chemical books, one of a scientific and the other of a technical nature. This was the first serious attempt to build up a chemical literature in English without primary regard to commercial conditions. W. A. Noyes has been the editor of Scientific Monographs since 1920. John Johnston was editor of Technologic Monographs from 1920 to 1922, and since that time H. E. Howe has been the editor. Each editor is assisted by a capable board of associate editors. These books are published through a business arrangement with the Chemical Catalog Company, of New York City. Twenty-seven books have already been issued. Thirty-five unpublished treatises have been announced and others are under consideration.

JOURNAL OF PHYSICAL CHEMISTRY.—The *Journal of Physical Chemistry* was founded by Wilder D. Bancroft and edited and published by him until January, 1923, when the Chemical Foundation guaranteed its publication to the extent of $10,000 a year for five years if arrangements could be consummated to place it on an international basis. A conference was held in London on June 23, 1923, by the Secretary of the SOCIETY with representatives of the Chemical Society (London)[1] and a definite arrangement was

[1] *J. Am. Chem. Soc.*, Proceedings, **44**, 91 (1922).

unanimously agreed to whereby the *Journal of Physical Chemistry* was to be continued under the joint auspices of the two societies, each having a representation of four members on the board, the board itself to elect the editor-in-chief. A request was later received from the Chemical Society (London) to permit the Faraday Society to join with them and nominate one of the board, which was unanimously approved. Wilder D. Bancroft was elected editor-in-chief, and accordingly for three years the *Journal of Physical Chemistry* has been continued as a journal of international character under the joint auspices of the societies above enumerated.

JOURNAL OF CHEMICAL EDUCATION.—On January 1, 1924, the Section of Chemical Education, not then organized as a division, undertook on its own financial responsibility, after the plan had been approved by the Executive Committee of the Council, the issuance of a new journal, the *Journal of Chemical Education*, which afterwards came under the auspices and direction of the Division of Chemical Education, and has been conducted with the financial aid of the Chemical Foundation upon a subscription basis. The journal has proved very successful under the editorship-in-chief of Neil E. Gordon and the business management of Erle M. Billings, and although not yet entirely self-supporting, there is every reason to believe that it will soon become so, since the number of subscribers is rapidly increasing. It has filled an important demand among the chemistry teachers in our colleges and secondary schools, bringing many of them in closer touch with the work of the SOCIETY for the development of American chemistry.

CHEMICAL REVIEWS.—*Chemical Reviews* was first published in April, 1924. It was initiated by a movement in the Division of Chemistry and Chemical Technology of the National Research Council, of which J. E. Zanetti was chairman, to provide a vehicle for the appearance of comprehensive analytical reviews, summaries, and short monographs on topics of interest to chemists. The crowded nature of the *Journal of the American Chemical Society* and the inability of the SOCIETY to give space in its pages to long articles of this character had deprived the profession of many valuable contributions. A number of such reviews having been prepared for publication, the Williams and Wilkins Company, of Baltimore, Maryland, came forward with an offer to publish them at their own risk and under their own business management, but under the absolute editorial control of the AMERICAN CHEMICAL SOCIETY. They agreed to give special rates on subscriptions to

members of the AMERICAN CHEMICAL SOCIETY and affiliated organizations; to publish at least four numbers a year of 500 pages to the volume; and not to duplicate the work of any other journal of the SOCIETY. *Chemical Reviews* was accordingly assigned its own definite field and has supplemented, not supplanted, the SOCIETY'S other journals. William A. Noyes, editor-in-chief of Scientific Monographs, was appointed editor-in-chief of *Chemical Reviews*, and the associate editors of Scientific Monographs and the editors of Technologic Monographs were assigned to assist him as an editorial board. Two successful volumes of *Chemical Reviews* have been completed at the time of the SOCIETY'S Fiftieth Anniversary.

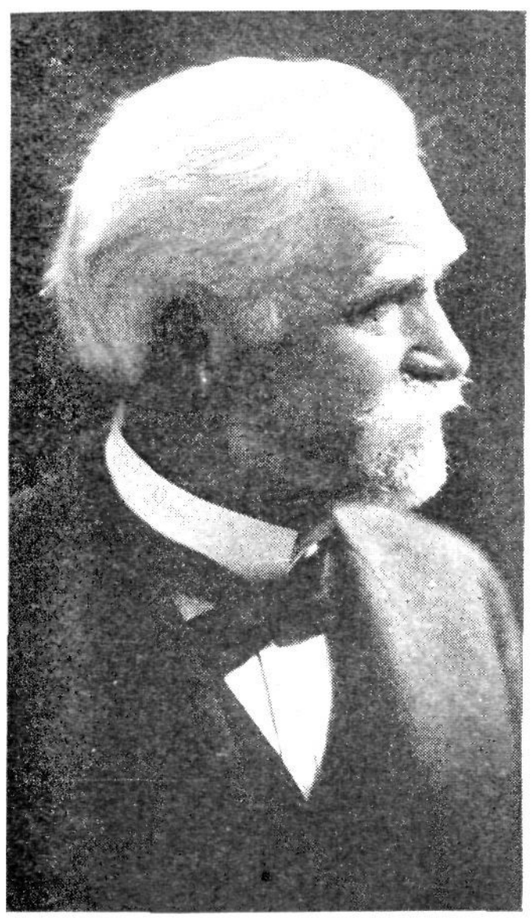
Organization Statistics

The object of the AMERICAN CHEMICAL SOCIETY from the time of its establishment has been:

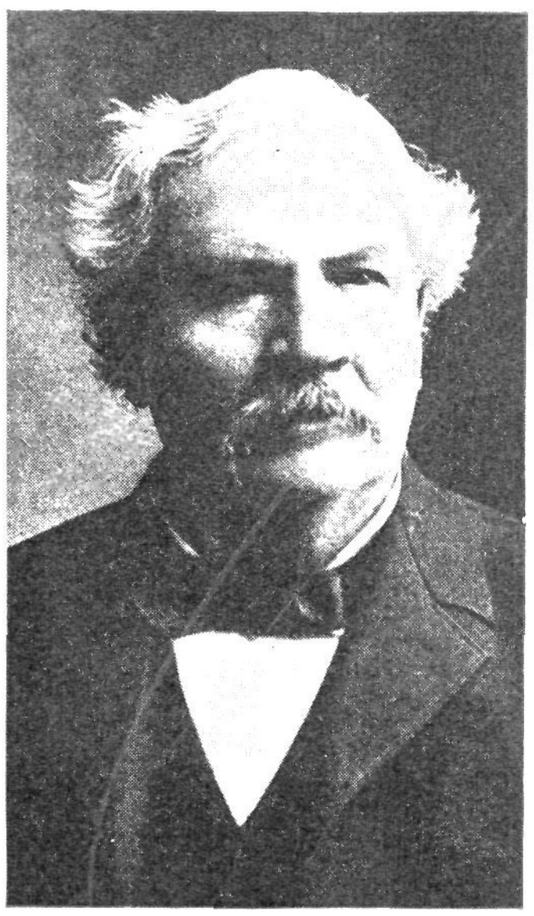
"The advancement of chemistry and the promotion of chemical research."

The results of its fifty years' work with this purpose in view are apparent to every observer. The SOCIETY has had a very large influence in bringing about the present unexcelled facilities and personnel, both in pure and applied chemistry in America. There is no country in the world in which there is a greater appreciation of the value of chemical research for the advancement of chemical knowledge and development of chemical industry. For this the AMERICAN CHEMICAL SOCIETY can justly claim much credit. The majority of its members are residents of the United States of America, but there is no geographical or national restriction, and individual chemists from nearly every civilized nation in the world are included in its membership. It has about the same number of foreign members as it had total membership at the time of its Twenty-fifth Anniversary.

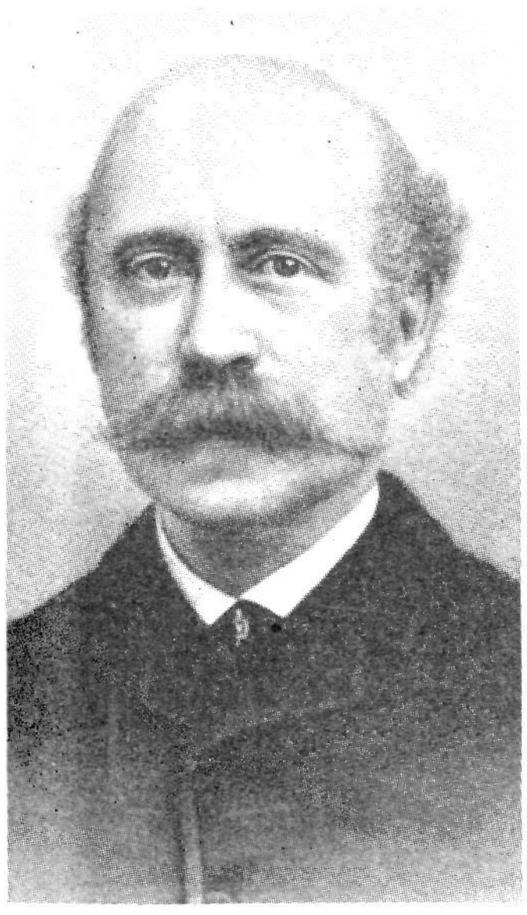
MEMBERSHIP.—Any person interested in chemistry, properly recommended by members of the SOCIETY, may be elected a member. Prior to 1903, it had associate as well as full members. General dissatisfaction in this attempt to classify the members of the SOCIETY led to its abandonment and to a much greater harmony within the SOCIETY without any loss of accomplishment or prestige. Although interest in the profession, desire for service, and good reputation are the sole requirements of membership, nevertheless those who belong to the SOCIETY are almost without exception well-trained and experienced chemists. The SOCIETY can record with pride that nearly every American chemist who



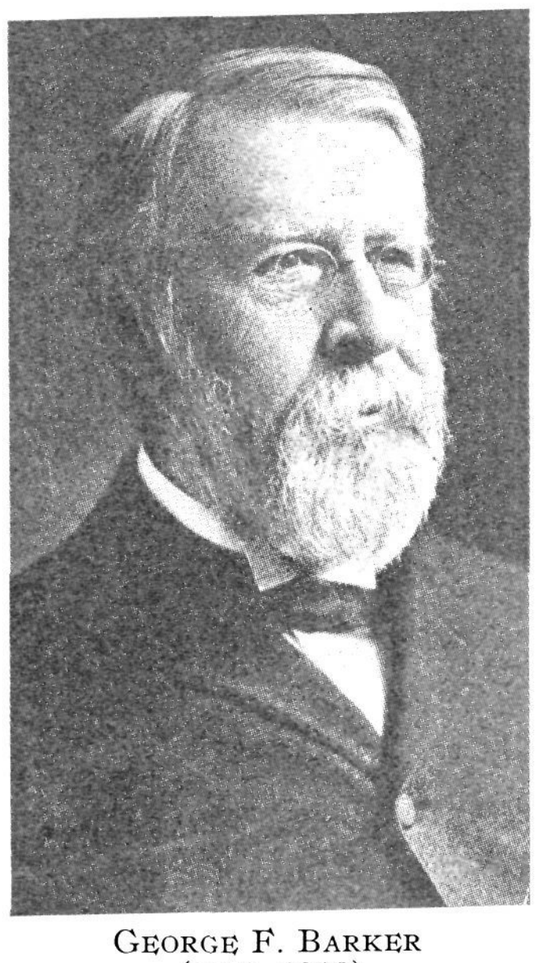
ALBERT B. PRESCOTT
(1832–1905)
President 1886



CHARLES A. GOESSMANN
(1827–1910)
President 1887



HENRY B. NASON
(1831–1895)
President 1890



GEORGE F. BARKER
(1835–1910)
President 1891

A. B. Prescott, C. A. Goessmann, and H. B. Nason were also Charter Members; H. B. Nason attended the Priestley Centennial in 1874; G. F. Barker was Corresponding Secretary in 1876 and 1877.

has enjoyed any considerable distinction during the past fifty years has been or is an active member of the AMERICAN CHEMICAL SOCIETY. Many of them have devoted much of their time, their talents, and their best energies to administering its affairs, to shaping its policy, and to securing for it the prominent position of dignity and of influence which it now holds in the scientific world. Five hundred and ninety-eight members have retained their connection with the SOCIETY twenty-five years or more. The character of its membership can be judged from the following classification made from its latest Directory:

	Per cent
EXECUTIVES OF FIRMS AND CORPORATIONS:	
Presidents, vice presidents, secretaries, treasurers, and chairmen of boards	7.28
MANAGERIAL:	
Directors, purchasing agents, general managers, sales agents, superintendents, directors of departments, chiefs of departments, and heads of departments	17.58
TECHNICAL DIRECTION:	
Chief chemists, metallurgists, chemical engineers, and consultants	19.57
CHEMICAL DEVELOPMENT:	
Research chemists	8.97
CHEMICAL CONTROL:	
Works chemists and laboratory chemists	8.47
PROFESSORS OF CHEMISTRY	10.06
INSTRUCTORS AND TEACHERS	5.84
STUDENTS:	
Graduate and undergraduate students	5.15
CORPORATIONS, MISCELLANEOUS AND UNCLASSIFIED	17.08

The following yearly record of membership from the beginning of the SOCIETY will indicate its growth:

Membership of the American Chemical Society, 1876–1926

1876	230	1891	302	1906	3079	1921	14,318
1877	265	1892	351	1907	3389	1922	14,400
1878	256	1893	460	1908	4004	1923	14,346
1879	289	1894	722	1909	4502	1924	14,515
1880	303	1895	903	1910	5081	1925	14,381
1881	314	1896	1011	1911	5603	1926*	14,808
1882	293	1897	1156	1912	6219		
1883	306	1898	1415	1913	6673		
1884	323	1899	1569	1914	7170		
1885	255	1900	1715	1915	7417		
1886	241	1901	1933	1916	8355		
1887	235	1902	2188	1917	10,603		
1888	227	1903	2428	1918	12,203		
1889	204	1904	2675	1919	13,686		
1890	238	1905	2919	1920	15,582		

* July count

Membership dues are $15.00 a year. There is no initiation fee.

LIFE MEMBERSHIP.—Any member who pays into the general treasury at one time the sum of $300 as a commutation for dues may become a Life Member, with the privilege of being exempt from further dues and of receiving all the publications of the SOCIETY during the remainder of his life. The income from this fund is used for the payment of the member's dues during his life, and on his death the principal sum reverts to a special membership fund, the income of which may be used only for the aid of chemical research. The SOCIETY now has twenty-one Life Members, as follows:

Wilder D. Bancroft	Adolph Kuttroff	A. G. Rosengarten
Walker Bowman	K. Y. Kwang	Frederic Rosengarten
Henry P. Busch	H. W. Leitch	George D. Rosengarten
O. C. Collins	Nariman A. Masani	Charles S. Roy
William F. Cuming	Wm. P. Mason	Albert P. Sachs
Herbert H. Dow	Emerson R. Miller	Oswald Silberrad
S. A. Goldschmidt	Charles E. Munroe	Elihu Thomson

HONORARY MEMBERSHIP.—Any person whose achievements in chemistry may be considered as entitling him to special recognition as an authority in theoretical or applied chemistry may be elected an Honorary Member, but only in a general meeting of the SOCIETY after his name, presented in writing by ten members, has received the written endorsement of a majority of the Council, and has laid over one general meeting, or six months, in the hands of the Executive Committee. The following is a list of past and present Honorary Members of the AMERICAN CHEMICAL SOCIETY:

Honorary Members

NAME	YEAR ELECTED	NAME	YEAR ELECTED
Berthelot,* M. P. E.	1876	Lunge,* George	1901
Boutlerow,* A. M. von	1876	Ramsay,* William	1901
Bunsen,* R. W.	1876	Roscoe,* Henry E.	1901
Cannizzaro,* Stanislao	1876	von Baeyer,* Adolph	1901
Dumas,* J. B.	1876	Arrhenius, Svante A.	1905
Frankland,* Edward	1876	Nernst,** Walther	1905
Williamson,* A. W.	1876	Roozeboom,* H. W. B.	1905
Woehler,* Friedrich	1876	Thomsen,* Julius	1905
Chevreul,* M. E.	1884	Perkin,* William Henry	1906
von Hoffman,* A. W.	1884	Curie, Marie S.	1910
Kekulé,* August	1889	Dewar,* James	1910
Mendeléeff,* Dmitri	1889	Fittig,* Rudolph	1910
Stas,* J. S.	1891	Mallet,* John W.	1910
Gibbs,* Wolcott	1894	Strutt,* John Wm. (Lord Rayleigh)	1910
Crookes,* William	1898		
Moissan,* Henri	1898	Van der Waals,* Johannes Diderik	1910
Van't Hoff,* J. H.	1898		
Morley,* E. W.	1900	Werner,* Alfred	1915
Ostwald,** Wilhelm	1900	Grignard, Victor	1917
Fischer,* Emil	1901	Ciamician,* Giacomo	1919

Honorary Members (Concluded)

NAME	YEAR ELECTED	NAME	YEAR ELECTED
Solvay,* Ernest	1920	Irvine, James C.	1926
Chandler,* Charles F.	1921	Miller, W. Lash	1926
Kestner, Paul	1921	Moureau, Charles	1926
Nichols, Wm. H.	1921	Pictet, Amé	1926
Pope, William J.	1921	Remsen, Ira	1926
Sörensen, S. P. L.	1924	Richards, Theodore W.	1926
Brauner, Bohuslav	1926	Sabatier, Paul	1926
Bruni, Giuseppe	1926	Sakurai, Joji	1926
Cohen, Ernst	1926	Smith, Edgar Fahs	1926
Donnan, Frederick G.	1926	Swarts, Frederic	1926

* Deceased
** Discontinued

CORPORATION MEMBERSHIP.—In 1909 the SOCIETY established a special membership for firms and corporations, known as Corporate Membership, at a higher rate of dues. Corporate members have the privilege of appointing a delegate to any meeting of the SOCIETY and the right to a limited number of reprints of special papers when such request is made in advance of publication. The main object of Corporate Membership is, however, to secure the active interest and patronage of the chief industrial concerns of America. In this the SOCIETY has been successful. Three hundred and eighty-two of our most important and leading chemical corporations have identified themselves officially, under this provision, with the AMERICAN CHEMICAL SOCIETY.

STUDENT MEMBERSHIP.—The Council and Directors have also voted to give special discounts to bona fide undergraduate and graduate students of chemistry, in order to assist them during this unproductive period and to interest them early in life in the aims and objects which the SOCIETY is fostering.

OFFICERS.—The officers of the SOCIETY consist of a President, one Vice President for each division of the SOCIETY, who is the presiding officer of such division, a Secretary, a Treasurer, the three editors of its basic publications, nine Directors, and a Council.

The Directors are the legal representatives of the SOCIETY and as such hold in trust and administer all the property of the SOCIETY for its use. The Directors consist of the President, Secretary, and the Treasurer ex officiis, and six Directors chosen by the Council, two each year for a term of three years, one Director being elected from each of the six regional divisions of territory into which the SOCIETY is divided. The regional Directors are nominated by the local sections within that territory, but are elected by the Council. The officers of the SOCIETY during the last twenty-five years follow:

Officers of the American Chemical Society, 1902–1926[1]

PRESIDENTS.—Ira Remsen, 1902; John H. Long, 1903; Arthur A. Noyes, 1904; Frank P. Venable, 1905; W. F. Hillebrand, 1906; Marston T. Bogert, 1907–8; Willis R. Whitney, 1909; Wilder D. Bancroft, 1910; Alexander Smith, 1911; Arthur D. Little, 1912–13; Theodore W. Richards, 1914; Charles H. Herty, 1915–16; Julius Stieglitz, 1917; Wm. H. Nichols, 1918–19; William A. Noyes, 1920; Edgar F. Smith, 1921–22; Edward C. Franklin, 1923; Leo H. Baekeland, 1924; James F. Norris, 1925–26.

SECRETARIES.—Albert C. Hale, 1902; William A. Noyes, 1903–7; Charles L. Parsons, 1907– .

TREASURERS.—Albert P. Hallock, 1902–16; E. G. Love, 1917–18; John E. Teeple, 1919– .

EDITORS, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY.—William A. Noyes, 1902–17; Arthur B. Lamb, 1918– .

EDITORS, CHEMICAL ABSTRACTS.—William A. Noyes, 1907–10; Austin M. Patterson, 1911–13; John J. Miller, 1914; E. J. Crane, 1915– .

EDITORS, INDUSTRIAL AND ENGINEERING CHEMISTRY.—W. D. Richardson, 1909–10; M. C. Whitaker, 1911–16; Charles H. Herty, 1917–20; Harrison E. Howe, 1921– .

COUNCIL.—The Council is an advisory body on every matter pertaining to the general management or policy of the SOCIETY. It consists of the officers of the SOCIETY ex officiis, twelve Councilors chosen from the SOCIETY at large, and one representative from each local section for every one hundred members or fraction thereof, in good standing, residing within its territory.

In 1923 the Council, having grown unwieldy through its expansion to one hundred ninety-four members, passed a By-Law establishing an Executive Committee to act ad interim for and on behalf of the Council on all matters of national policy or import and to serve in an advisory capacity in connection with matters coming before the Council. The Executive Committee has been very helpful, especially in arranging matters in concise form to be brought before the Council, thereby avoiding unnecessary discussion and expediting business.

CONSTITUTION AND BY-LAWS.—The Constitution and By-Laws of the SOCIETY have undergone changes from time to time as necessity arose with the growth of the SOCIETY and with the changed conditions in the country. Under its wise provisions the SOCIETY functions efficiently and every member of the SOCIETY has complete representation and equal opportunity in SOCIETY affairs. The Council meets twice a year, at the two general meetings of the SOCIETY, and may be called into session at any time by the President.

COMMITTEES.—The business of the SOCIETY is conducted quite largely through committees, which change frequently and automatically retire, unless reappointed by the President, at the time of the spring meeting. In order that the members may have full

[1] For officers, 1876–1901, see *J. Am. Chem. Soc.*, Supplement (Twenty-fifth Anniversary of the American Chemical Society), p. 79 (1902).

information in regard to the officers and the committees, they are regularly printed in each issue of the *Journal of the American Chemical Society*.

LOCAL SECTIONS.—The local sections of the SOCIETY have grown in number from the establishment of the Rhode Island Section in 1891 until there are seventy sections in active operation throughout the United States. They are given territory within which the members may be reasonably expected to attend the meetings at the sectional headquarters, and all members of the SOCIETY residing within that territory are *ipso facto* members of the local section. The local sections meet at stated times, determined by each section, usually monthly, from September until June. They have their own programs, conduct their own business, and are essentially autonomous in local affairs. No local section can commit the SOCIETY in any matter of national scope. Each local section receives from the general SOCIETY an amount varying from seventy-five cents to one dollar and fifty cents per member in reverse proportion to the number of their members. They may make rules and regulations for their government not inconsistent with the Constitution and By-Laws of the SOCIETY. They each have definite headquarters, both headquarters and territory being subject to the approval of the Council, which may change them if desirable.

Following is a list of the local sections arranged in the order of their establishment:

Local Sections
(In order of establishment)

NAME	DATE CHARTERED	HEADQUARTERS	MEMBERSHIP
Rhode Island	January 21, 1891	Providence, R. I.	92
New York	September 30, 1891	New York, N. Y.	1255
Cincinnati	March 29, 1892	Cincinnati, Ohio	221
Washington, D. C.	April 13, 1893	Washington, D. C.	389
Lehigh Valley	December 8, 1893	Easton and Bethlehem, Pa.	93
New Orleans	August 5, 1894	New Orleans, La.	*
Chicago	May 10, 1895	Chicago, Ill.	809
Nebraska	May 10, 1896	Lincoln, Nebr.	26
North Carolina	December 6, 1896	Raleigh, N. C.	57
Columbus	October 7, 1897	Columbus, Ohio	105
Northeastern	March 7, 1898	Boston, Mass.	775
Philadelphia	April 15, 1899	Philadelphia, Pa.	609
University of Michigan	December 7, 1899	Ann Arbor, Mich.	70
Kansas City	November 6, 1900	Kansas City, Mo.	146
California	December 31, 1901	San Francisco, Calif.	350
Cornell	December 9, 1902	Ithaca, N. Y.	58
Pittsburgh	February 11, 1903	Pittsburgh, Pa.	397
Georgia	January 23, 1904	Atlanta, Ga.	45
Iowa	March 27, 1905	Iowa City, Iowa	105
Western New York	November 18, 1905	Buffalo, N. Y.	243
Minnesota	January 4, 1906	Minneapolis, Minn.	186

Local Sections (Concluded)
(In order of establishment)

NAME	DATE CHARTERED	HEADQUARTERS	MEMBERSHIP
Indiana	February 2, 1906	Indianapolis, Ind.	137
University of Illinois	April 9, 1906	Urbana, Ill.	139
Louisiana	June 28, 1906	New Orleans, La.	76
Syracuse	May 6, 1907	Syracuse, N. Y.	103
Wisconsin	July 9, 1907	Madison, Wis.	120
St. Louis	July 26, 1907	St. Louis, Mo.	202
Eastern New York	January 7, 1908	Schenectady, N. Y.	104
Louisville	July 18, 1908	Louisville, Ky.	27
Milwaukee	December 8, 1908	Milwaukee, Wis.	115
Cleveland	January 6, 1909	Cleveland, Ohio	240
Puget Sound	February 16, 1909	Seattle, Wash.	65
University of Missouri	June 3, 1909	Columbia, Mo.	31
Nashville	January 5, 1911	Nashville, Tenn.	23
Southern California	February 28, 1911	Los Angeles, Calif.	288
Connecticut Valley	April 12, 1911	Hartford, Conn.	110
Detroit	January 3, 1912	Detroit, Mich.	143
New Haven	February 3, 1912	New Haven, Conn.	107
Northern Inter-Mountain	April 4, 1912	Pullman, Wash.	*
Lexington	April 24, 1912	Lexington, Ky.	30
Maine	April 24, 1912	Orono, Me.	35
Oregon	July 5, 1912	Portland, Ore.	44
Rochester	July 5, 1912	Rochester, N. Y.	139
Alabama	March 24, 1913	Birmingham, Ala.	37
South Carolina	April 14, 1914	Columbia, S. C.	*
Maryland	September 23, 1914	Baltimore, Md.	217
Virginia	April 9, 1915	Richmond, Va.	96
Ames	October 12, 1915	Ames, Iowa	55
South Dakota	April 29, 1916	Vermillion, S. D.	*
Vermont	April 29, 1916	Burlington, Vt.	23
Central Texas	April 18, 1917	College Station, Tex.	52
Michigan State College	April 18, 1917	East Lansing, Mich.	36
Southeastern Texas	April 18, 1917	Port Arthur, Tex.	81
Toledo	April 18, 1917	Toledo, Ohio	40
Delaware	December 28, 1917	Wilmington, Del.	160
Oklahoma	May 14, 1919	Stillwater, Okla.	74
Midland	December 8, 1919	Midland, Mich.	23
Colorado	April 21, 1920	Denver, Colo.	71
South Jersey	April 21, 1920	Carneys Point, N. J.	31
Omaha	May 6, 1920	Omaha, Nebr.	34
Savannah	May 10, 1920	Savannah, Ga.	*
Arkansas	May 7, 1921	Fayetteville, Ark.	*
Purdue	January 3, 1922	Lafayette, Ind.	23
St. Joseph Valley	January 3, 1922	South Bend, Ind.	22
Hawaiian	April 21, 1922	Honolulu, T. H.	29
Sacramento	April 21, 1922	Sacramento, Calif.	27
Northern West Virginia	April 28, 1922	Morgantown, W. Va.	26
Akron	March 5, 1923	Akron, Ohio	138
Erie	April 9, 1923	Erie, Pa.	36
Illinois-Iowa	July 20, 1923	Davenport, Iowa	26
Florida	January 4, 1924	Gainesville, Fla.	54
Central Pennsylvania	February 7, 1924	State College, Pa.	56
Arizona	April 29, 1924	Tucson, Ariz.	23
Northwestern Utah	April 29, 1924	Salt Lake City, Utah	27
North Jersey	July 22, 1925	Newark, N. J.	542
Northern Louisiana	November 30, 1925	Shreveport, La.	24

* Discontinued.

DIVISIONS.—In the chemical life of all countries there are two interests, "useless each without the other," but for some unexplainable reason always more or less at variance. In no country but our own have the pure and applied chemical scientists been able to work together in one organization with mutual appreciation and without serious jealousies. This is one of the chief secrets of the success of the AMERICAN CHEMICAL SOCIETY, which was brought about through the wise foresight of President Bogert, who, in 1909, clearly foresaw that the SOCIETY was likely to disintegrate unless some method was devised by which specialists in various branches of chemistry might gather together in essentially autonomous meetings. Accordingly, he inaugurated the divisional system, establishing first the Division of Industrial and Engineering Chemistry, followed gradually by others, until now the SOCIETY conducts its activities in seventeen divisions and two sections. Sections differ little from divisions except that they are not given divisional status with by-laws and officers of their own until they have held a sufficient number of meetings to prove the need and demand for their special services. The divisions are professional groups organized from members of the SOCIETY and authorized by the Council to stimulate and develop the growth of the special activity assigned to them. They elect their own officers; they have the right to make by-laws for their own government, subject to the approval of the Council and not inconsistent with the Constitution and By-Laws of the SOCIETY; they may collect funds to be expended for their own purposes, and have the entire control and management of such funds. Their chairmen are Vice Presidents of the SOCIETY and ex officiis members of the Council.

The divisions have proved of the utmost benefit to the AMERICAN CHEMICAL SOCIETY and its growth. Through them the need of the specialist is met. Each division has every advantage which can come to an entirely separate organization and enjoys likewise the great additional advantage which comes with union and strength of numbers. In a sense, then, the SOCIETY is constituted in much the same way as our national Government—the divisions represent the states, functioning quite as independently and conducting their specialized affairs and programs with almost complete autonomy. No wiser step has been taken in the SOCIETY's development than the organization of the divisional system. *Industrial and Engineering Chemistry* was established shortly after the organization of the Division of Industrial and Engineering Chemistry, and it became the journal especially assigned to the branches which its name implies, more particularly with reference to research.

The divisions of the SOCIETY, alphabetically arranged, with date of their authorization and their officers, are as follows:

Divisions of the American Chemical Society

AGRICULTURAL AND FOOD CHEMISTRY.—*Authorized,* 1908. *Chairmen:* W. D. Bigelow, 1909; C. D. Woods, 1910; H. E. Barnard, 1911–13; Floyd W. Robison, 1914–15; L. M. Tolman, 1916; T. J. Bryan, 1917–18; W. D. Richardson, 1919; C. E. Coates, 1920–21; T. J. Bryan, 1922; H. A. Noyes, 1923; C. H. Bailey, 1924–25; E. F. Kohman, 1926. *Secretaries:* W. B. D. Penniman, 1909; B. E. Curry, 1910–11; Glen F. Mason, 1912–15; George B. Taylor, 1916; Glen F. Mason, 1917; Fred F. Flanders, 1918; T. J. Bryan, 1919–21; C. S. Brinton, 1922– .

BIOLOGICAL CHEMISTRY.—*Authorized,* 1913. *Chairmen:* C. L. Alsberg, 1914–17; W. J. N. Osterhout, 1918; I. K. Phelps, 1919; R. A. Gortner, 1920; A. W. Dox, 1921; H. B. Lewis, 1922; J. S. Hughes, 1923; W. T. Bovie, 1924; R. Adams Dutcher, 1925; R. J. Anderson, 1926. *Secretaries:* I. K. Phelps, 1914–18; R. A. Gortner, 1919; A. W. Dox, 1920; H. B. Lewis, 1921; J. S. Hughes, 1922; W. T. Bovie, 1923; R. Adams Dutcher, 1924; R. J. Anderson, 1925; J. J. Willaman, 1926.

CELLULOSE CHEMISTRY.—*Authorized,* 1922. *Chairmen:* G. J. Esselen, Jr., 1923–24; H. LeB. Gray, 1925– . *Secretary:* L. F. Hawley, 1923– .

CHEMICAL EDUCATION.—*Authorized,* 1924. *Chairmen:* W. A. Noyes, 1925; Wilhelm Segerblom, 1926. *Secretary:* B. S. Hopkins, 1925– .

DYE CHEMISTRY.—*Authorized,* 1920. *Chairmen:* A. B. Davis, 1920–21; W. J. Hale, 1922–24; R. Norris Shreve, 1925– . *Secretaries:* R. Norris Shreve, 1920–24; O. E. Roberts, Jr., 1925– .

FERTILIZER CHEMISTRY.—*Authorized,* 1908. *Chairmen:* F. B. Carpenter, 1909–10; Paul Rudnick, 1911–13; J. E. Breckenridge, 1914–18; F. B. Carpenter, 1919– . *Secretaries:* J. E. Breckenridge, 1909–10; J. P. Street, 1911–12; J. E. Breckenridge, 1913; E. L. Baker, 1914–15; F. B. Carpenter, 1916; L. L. Van Slyke, 1917; F. B. Carpenter, 1918; H. C. Moore, 1919– .

GAS AND FUEL CHEMISTRY.—*Authorized,* 1925. *Chairmen:* R. T. Haslam, 1925; S. W. Parr, 1926. *Secretary:* O. O. Malleis, 1925– .

INDUSTRIAL AND ENGINEERING CHEMISTRY.—*Authorized,* 1908. *Chairmen:* A. D. Little, 1908–10; G. C. Stone, 1911; George D. Rosengarten, 1912–15; H. E. Howe, 1916–17; H. S. Miner, 1918–19; H. D. Batchelor, 1920–21; W. K. Lewis, 1922; D. R. Sperry, 1923–24; W. A. Peters, Jr., 1925– . *Secretaries:* B. T. B. Hyde, 1908–9; G. C. Stone, 1910; F. E. Gallagher, 1911; Geo. P. Adamson, 1912; S. H. Salisbury, 1913; H. E. Howe, 1914–15; S. H. Salisbury, 1916–18; H. E. Howe, 1919–21; E. M. Billings, 1922– .

LEATHER AND GELATIN CHEMISTRY.—*Authorized,* 1921. *Chairman:* J. Arthur Wilson, 1922– . *Secretary:* Arthur W. Thomas, 1922– .

MEDICINAL PRODUCTS, CHEMISTRY OF.—*Authorized,* 1909. *Chairmen:* A. B. Stevens, 1910; B. L. Murray, 1911–13; Frank R. Eldred, 1914–15; J. H. Long, 1916; L. F. Kebler, 1917; F. O. Taylor, 1918–19; Charles E. Caspari, 1920–21; Edgar B. Carter, 1922–23; E. H. Volwiler, 1924–25; H. A. Shonle, 1926. *Secretaries:* B. L. Murray, 1910; Frank R. Eldred, 1911–13; L. A. Brown, 1914–15; George D. Beal, 1916–19; Edgar B. Carter, 1920–21; E. H. Volwiler, 1922–23; H. A. Shonle, 1924–25; Arthur W. Dox, 1926.

ORGANIC CHEMISTRY.—*Authorized,* 1909. *Chairmen:* E. C. Franklin, 1910; G. B. Frankforter, 1911; Treat B. Johnson, 1912–13; B. F. Allen, 1914–15; C. G. Derick, 1916; J. R. Bailey, 1917; William J. Hale, 1918; L. W. Jones, 1919; E. E. Reid, 1920; Roger Adams, 1921; H. T. Clarke, 1922; Frank C. Whitmore, 1923; R. R. Renshaw, 1924; J. A. Nieuwland, 1925; Marston T. Bogert, 1926. *Secretaries:* R. H. McKee, 1910; William J. Hale, 1911–13; C. G. Derick, 1914–15; Harry L. Fisher, 1916–19; Roger Adams, 1920; H. T. Clarke, 1921; Frank C. Whitmore, 1922; R. R. Renshaw, 1923; J. A. Nieuwland, 1924; Frank C. Whitmore, 1925– .

PETROLEUM CHEMISTRY.—*Authorized,* 1922. *Chairman:* R. R. Matthews, 1923– . *Secretaries:* W. A. Gruse, 1923; G. A. Burrell, 1924– .

PHYSICAL AND INORGANIC CHEMISTRY.—*Authorized,* 1908. *Chairmen:* Charles H. Herty, 1909; E. C. Franklin, 1910; H. P. Talbot, 1911; W. Lash Miller, 1912; S. L. Bigelow, 1913; G. A. Hulett, 1914–15; E. W. Washburn, 1916; T. W. Richards, 1917; S. L. Bigelow, 1918; W. E. Henderson, 1919; W. D. Harkins, 1920; Harry N. Holmes, 1921; S. E. Sheppard, 1922; Robert E. Wilson, 1923; Graham Edgar, 1924; Arthur Hill, 1925; H. B. Weiser, 1926. *Secretaries:* W. D. Bancroft, 1909; S. L. Bigelow, 1910–11; Roger C. Wells, 1912–13; H. N. McCoy, 1914–15; James Kendall, 1916; Earl B. Millard, 1917; W. E. Henderson, 1918; W. A. Patrick, 1919; Harry N. Holmes, 1920; S. E. Sheppard, 1921; Robert E. Wilson, 1922; Graham Edgar, 1923; H. B. Weiser, 1924; G. S. Forbes, 1925; G. L. Clark, 1926.

RUBBER CHEMISTRY.—*Authorized,* 1919. *Chairmen:* J. B. Tuttle, 1919; W. K. Lewis, 1920; W. W. Evans, 1921; C. W. Bedford, 1922; W. B. Wiegand, 1923; E. P. Spear, 1924; C. R. Boggs, 1925; J. M. Bierer, 1926. *Secretary:* Arnold H. Smith, 1919– .

SUGAR CHEMISTRY.—*Authorized,* 1921. *Chairmen:* S. J. Osborn, 1922; W. D. Horne, 1923; F. W. Zerban, 1924; W. B. Newkirk, 1925– . *Secretary:* Frederick J. Bates, 1922– .

WATER, SEWAGE, AND SANITATION CHEMISTRY.—*Authorized,* 1915. *Chairmen:* Edward Bartow, 1915–16; R. B. Dole, 1917; R. S. Weston, 1918–19; J. W. Ellms, 1920; W. P. Mason, 1921; A. M. Buswell, 1922–23; W. W. Skinner, 1924; F. W. Mohlman, 1925– . *Secretaries:* H. P. Corson, 1915–16; E. H. S. Bailey, 1917; Frank E. Hall, 1918; W. W. Skinner, 1919–23; F. R. Georgia, 1924– .

In addition to the above-mentioned divisions, the Section of the History of Chemistry and the Section of Paint and Varnish Chemistry have been operating successfully through a number of meetings with every prospect of being soon given divisional status.

MEETINGS.—The AMERICAN CHEMICAL SOCIETY holds two meetings a year, in the spring and in the fall, usually in April and in September. At these conventions from 400 to 2500 chemists gather to conduct the business of the SOCIETY, to meet and form contacts with one another, and to present or listen to scientific programs, both general and divisional. The meetings are held in different parts of the United States or Canada on invitation, usually from one of the SOCIETY's local sections, and with the special idea of stimulating chemical interest and development in the region visited.

The general meetings held by the AMERICAN CHEMICAL SOCIETY since the first general meeting in Newport, Rhode Island, in August, 1890, are as follows:

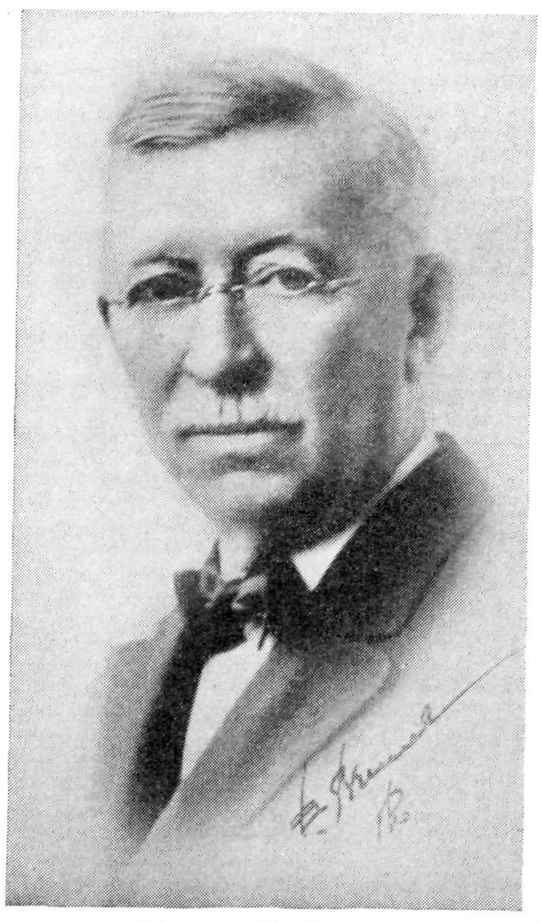
General Meetings of the American Chemical Society

1. Newport, R. I., August 6–7, 1890.
2. Philadelphia, Pa., December 30–31, 1890.
3. Washington, D. C., August 17–18, 1891.
4. New York, N. Y., December 29–30, 1891.
5. Rochester, N. Y., August 16–17, 1892.
6. Pittsburgh, Pa., December 28–29, 1892.
7. Chicago, Ill., August 21–22, 1893.
8. Baltimore, Md., December 17–18, 1893.
9. Brooklyn, N. Y., August 15–16, 1894.
10. Boston and Cambridge, Mass., Dec. 27–28, 1894.

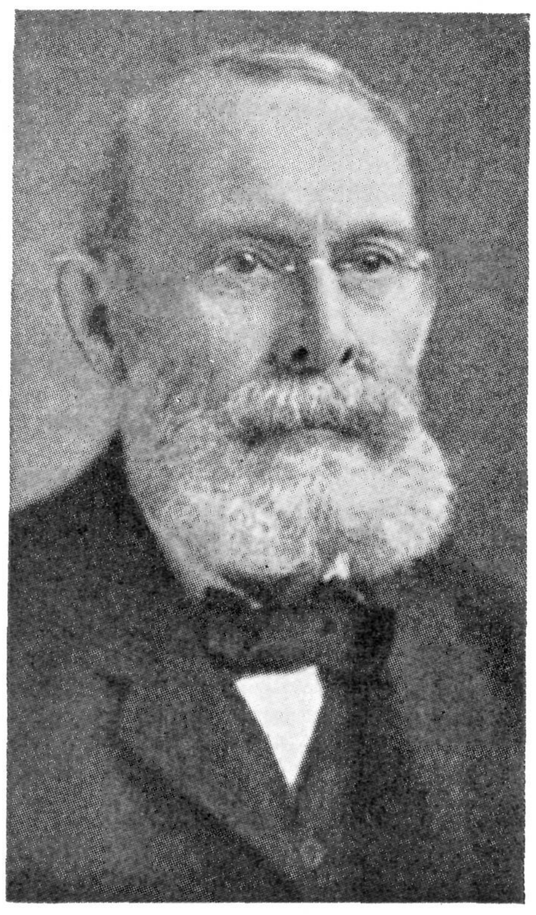
11. Springfield, Mass., August 27–28, 1895.
12. Cleveland, Ohio, December 30–31, 1895.
13. Buffalo, N. Y., August 21–22, 1896.
14. Troy, N. Y., December 29–30, 1896.
15. Detroit, Mich., August 9–10, 1897.
16. Washington, D. C., December 29–30, 1897.
17. Boston, Mass., August 22–23, 1898.
18. New York, N. Y., December 28–29, 1898.
19. Columbus, Ohio, August 21–22, 1899.
20. New Haven, Conn., December 27–28, 1899.
21. New York, N. Y., June 25–26, 1900.
22. Chicago, Ill., December 27–28, 1900.
23. New York, N. Y., April 12–13, 1901.
24. Denver, Colo., August 26–27, 1901.
25. Philadelphia, Pa., December 30–31, 1901.
26. Pittsburgh, Pa., June 30–July 1, 1902.
27. Washington, D. C., December 29–30, 1902.
28. Cleveland, Ohio, June 29–30, 1903.
29. St. Louis, Mo., December 30–31, 1903.
30. Providence, R. I., June 21–23, 1904.
31. Philadelphia, Pa., December 30–31, 1904.
32. Buffalo, N. Y., June 22–24, 1905.
33. New Orleans, La., December 29–30, 1905.
34. Ithaca, N. Y., June 28–30, 1906.
35. New York, N. Y., December 27–30, 1906.
36. Toronto, Canada, June 27–29, 1907.
37. Chicago, Ill., December 31, 1907–January 3, 1908.
38. New Haven, Conn., June 29–July 2, 1908.
39. Baltimore, Md., December 29, 1908–January 1, 1909.
40. Detroit, Mich., June 29–July 2, 1909.
41. Boston, Mass., December 27–31, 1909.
42. San Francisco, Calif., July 12–16, 1910.
43. Minneapolis, Minn., December 28–31, 1910.
44. Indianapolis, Ind., June 28–July 1, 1911.
45. Washington, D. C., December 27–30, 1911.
46. New York, N. Y., September 11, 1912.
47. Milwaukee, Wis., March 25–28, 1913.
48. Rochester, N. Y., September 8–12, 1913.
49. Cincinnati, Ohio, April 6–10, 1914.
50. New Orleans, La., March 31–April 3, 1915.
51. Seattle, Wash., August 31–September 3, 1915.
52. Urbana-Champaign, Ill., April 18–21, 1916.
53. New York, N. Y., September 25–30, 1916.
54. Kansas City, Mo., April 10–13, 1917.
55. Boston, Mass., September 9–13, 1917.
56. Cleveland, Ohio, September 10–13, 1918.
57. Buffalo, N. Y., April 7–11, 1919.
58. Philadelphia, Pa., September 2–6, 1919.
59. St. Louis, Mo., April 12–17, 1920.
60. Chicago, Ill., September 6–10, 1920.
61. Rochester, N. Y., April 25–30, 1921.
62. New York, N. Y., September 6–10, 1921.
63. Birmingham, Ala., April 3–7, 1922.
64. Pittsburgh, Pa., September 4–8, 1922.
65. New Haven, Conn., April 2–7, 1923.
66. Milwaukee, Wis., September 10–14, 1923.
67. Washington, D. C., April 21–26, 1924.
68. Ithaca, N. Y., September 10–13, 1924.
69. Baltimore, Md., April 6–10, 1925.
70. Los Angeles, Calif., August 3–8, 1925.
71. Tulsa, Okla., April 5–9, 1926.
72. Philadelphia, Pa., September 6–11, 1926.

GEORGE C. CALDWELL
(1834–1907)
President 1892

Underwood & Underwood
HARVEY W. WILEY
(1844–)
President 1893, 1894



EDGAR F. SMITH
(1854–)
President 1895, 1921, 1922



CHARLES B. DUDLEY
(1842–1909)
President 1896, 1897

The SOCIETY has grown so large that the meetings of the local sections and the general meetings of the SOCIETY have of late not entirely satisfied the demands of all its members. Accordingly, two additional forms of chemical meetings have recently become popular:

First, regional or intersectional meetings, in which at various times, without interfering with the general meetings of the SOCIETY, groups of local sections convene for one or two days on their own initiative, through their own organizations, and by mutual agreement. Chemists who take part in these regional meetings gather for purposes of good fellowship, making new acquaintances, the presentation of scientific papers, and the discussion of common problems.

Second, special divisional meetings or symposia by groups of specialists. This form of meeting has recently come into vogue and unquestionably meets a pressing demand of the specialist. They are quite frequently joined with, and made the chief feature of, one of the regional or intersectional meetings. For example, the organic chemists of the country, with the full approval of the general SOCIETY, held a symposium on organic chemistry with the Rochester Section, December 29–31, 1925. The program was one of the most successful organic chemical programs ever presented in the United States and the leading organic chemists of America were present. A little later, February 22–23, 1926, the Division of Rubber Chemistry held a separate program upon the problems of rubber chemistry in the center of the rubber industry, and with the local section of the AMERICAN CHEMICAL SOCIETY at Akron. Some three hundred and fifty chemists interested in the chemistry of India rubber were present, and thus another separate divisional meeting was held within the SOCIETY which satisfied fully the legitimate desires of these chemists to convene and discuss their specialty.

Likewise, the Section of Paint and Varnish Chemistry, soon destined to become a division of the AMERICAN CHEMICAL SOCIETY, met for a special program in their field with the Wisconsin Section at Madison, May 27–29, 1926. The leading chemists in the paint and varnish industry were present, and an enthusiastic meeting was again the result.

All of these special meetings were held after consultation with the officers of the SOCIETY, in order not to transgress but to supplement and extend the aims and objects of the SOCIETY'S general meetings.

Some members have felt that these separate meetings would

tend to a division of the SOCIETY into smaller associations. Such, however, is far from being the case. On the contrary, they serve to bind the SOCIETY more closely together. They meet the demand of the specialist and, being within the SOCIETY, their members share the strength and common purpose that come from the union of all American chemists in one great organization which, serving one and all alike, can furnish them with the printed record of chemical research and development throughout the world. The attending chemists went from each one of these separate divisional meetings more loyal members of the AMERICAN CHEMICAL SOCIETY, for they realized more fully than ever before that the sole object of the AMERICAN CHEMICAL SOCIETY is the advancement of chemistry, the development of chemical research, and the welfare of American chemists.

LIBRARY.—The library of the AMERICAN CHEMICAL SOCIETY, which has been gradually growing through its fifty years of existence, has been made a part of the library of the Chemists Club of New York City. All members of the AMERICAN CHEMICAL SOCIETY have access to the combined library, but the library personnel and space are furnished by the Chemists Club. This arrangement was made with the Chemists Club in 1912.

NEWS SERVICE.—When chemistry began to arouse the interest of the newspaper editors of the country, it became evident that the SOCIETY must either take steps to provide authentic information, prepared in a form attractive to the daily press, or else chemistry would suffer from the inclination to overemphasize the sensational development in the science. Following the advice of a committee appointed to study publicity, the Directors in 1917 provided five hundred dollars with which to begin this activity. No record of results was kept for that year, but clippings were measured from 1918 until 1924, inclusive, when the number became too great to warrant the cost of collection. Results are shown in the following table:

American Chemical Society News Service Clippings

YEAR	COST	INCHES
1917	$ 500	——
1918	1,850	5,000
1919	2,069	8,000
1920	8,078	21,000
1921	12,792	70,000
1922	10,306	79,000
1923	8,154	115,000
1924	6,580	205,000
1925	7,758	——

The gain in publicity indicates both the need and the success of the AMERICAN CHEMICAL SOCIETY News Service. The releases have been given prominence in the most important daily papers, magazines, and trade publications, both at home and abroad. Tangible results of benefit to chemistry can be recorded to the credit of the News Service, and the SOCIETY'S success has been envied by other scientific organizations. The News Service stands as a national institution accredited by the press and used in increasing measure by editors who realize the interest of their readers in the subject and who desire to present, in authentic form, news of the latest advances of our science.

PRIZE ESSAY CONTESTS.—Convinced of the necessity for developing an intelligent appreciation of the vital relation of chemistry to national progress, safety, and public welfare, Hon. and Mrs. Francis P. Garvan offered a series of prizes in 1923 to be awarded to students in high and secondary schools, both public and private, on a basis which made it possible to give six first prizes in each state of the Union and six national prizes. The state prizes were twenty dollars each, while each national winner received a four-year college scholarship, plus five hundred dollars annually for four years. This magnanimous offer was followed by the announcement that ways had been found for distributing a set of five books as the nucleus of a library which could be read with interest and understanding by non-technically trained people. Many sets of these books were distributed to schools and libraries without cost, and others were offered at the nominal price of two dollars and a half per set.

The books distributed were:

"Creative Chemistry," by Edwin E. Slosson
"Life of Pasteur," by René Vallery-Radot
"Riddle of the Rhine," by Victor Lefebure
"Discovery, or The Spirit and Service of Science," by Sir Richard Gregory
"The Future Independence and Progress of American Medicine in the Age of Chemistry," by a Committee of American Scientists.

The subjects chosen for the essays were:

The Relation of Chemistry to Health and Disease
The Relation of Chemistry to the Enrichment of Life
The Relation of Chemistry to Agriculture or Forestry
The Relation of Chemistry to National Defense
The Relation of Chemistry to the Home
The Relation of Chemistry to the Development of an Industry or a Resource of the United States.

A national committee was organized with Hon. Herbert Hoover as chairman. Thanks to the interest and assistance of members of the SOCIETY and many business and professional men and

women interested in the objects of the contest, as well as school officials and teachers, this contest was successful from the start and has been succeeded by a similar contest each year. Notwithstanding the large number of national contests, this series, under the auspices of the SOCIETY, has been recognized for its inherent merit and continues to receive gratifying support.

In 1924 a contest was added for the best essays in the same subjects among college students, the prizes being six in number, of one thousand dollars each. This contest was repeated in the academic year of 1925–1926 and is to be held again in 1926–1927, but will be limited to members of the freshman class. In 1926–1927 there will also be a contest on the same subjects with cash prizes open to students in normal schools and teachers' colleges.

Following the distribution of the first set of books, there have been provided two volumes of "Chemistry in Industry" and one of "Chemistry in Agriculture" to meet the need for books in these subjects. These books have been prepared by specialists and are written in non-technical language so as to be easily understood by the contestants. Some fifty thousand of the original sets of books have been distributed and a like number of volumes of "Chemistry in Industry."

It is believed that this activity is one of utmost importance to the future of chemistry in America. Its purpose is not to increase the number of those who make chemistry their profession, but rather to create a growing public interest in chemistry and chemical activity and to encourage the acquisition of knowledge about chemistry, as distinguished from a study of the science from the professional point of view. The generous and increasing support that has come to chemistry in America may be traced in no small degree to the influence of the Prize Essay Contest and to the efforts of those who, through the contest, have come to appreciate what chemistry means.

MEDALS.—Three medals have been established by the AMERICAN CHEMICAL SOCIETY, or by its local sections.

The Priestley Medal.—The Priestley Medal was founded by the AMERICAN CHEMICAL SOCIETY from the residue of a fund collected by the Priestley Memorial Committee for the purpose of placing a portrait of Joseph Priestley, the discoverer of oxygen, in the National Museum at Washington, D. C.

The Priestley Medal is an award of the general SOCIETY and is given every three years for distinguished services to chemistry. It may be awarded to a citizen of any nation without regard to sex. The recipient may be invited to deliver an address at one

of the general meetings of the AMERICAN CHEMICAL SOCIETY. The medal has been awarded as follows:

1923—Ira Remsen, no address.
1926—Edgar F. Smith, "Joseph Priestley."

The Nichols Medal.—This medal was established by William H. Nichols in New York in 1902 to stimulate original research in chemistry. It is presented annually, provided, in the opinion of the jury of award, there is a worthy recipient. It is open to investigators who have published original contributions in any of the journals of the AMERICAN CHEMICAL SOCIETY, or of those published under its auspices, during the three calendar years next preceding the presentation meeting. It is presented at the March meeting of the New York Section of the AMERICAN CHEMICAL SOCIETY, and the recipient is expected at that time to deliver an address upon the subject of the award. The following have been awarded the Nichols Medal:

Recipients of the Nichols Medal

YEAR	RECIPIENT	TITLE OF RESEARCH
1903	E. B. Voorhees	Studies in Denitrification
1904	No award	
1905	Charles L. Parsons	Atomic Weight of Beryllium
1906	Marston T. Bogert	Researches on Quinazolines
1907	M. B. Bishop	Estimation of Arsenic
1908	W. H. Walker	Corrosion of Iron
1909	W. A. Noyes H. C. P. Weber	Atomic Weight of Chlorine
1910	L. H. Baekeland	Researches on Bakelite
1911	M. A. Rosanoff C. W. Easley	On the Partial Vapor Pressure of Binary Mixtures
1912	Charles James	Rare Earth Compounds
1913	No award	
1914	Moses Gomberg	Triphenylmethyl
1915	Irving Langmuir	Chemical Reactions at Low Pressures
1916	Claude S. Hudson	Researches on Sugars
1917	No award	
1918	Treat B. Johnson	Researches on Pyrimidines
1919	No award	
1920	Irving Langmuir	Arrangements of Electrons in Atoms and Molecules
1921	Gilbert N. Lewis	The Third Law of Thermodynamics
1922	No award	
1923	Thomas Midgely, Jr.	Some Fundamental Relations among the Elements as Regards the Suppression of Gaseous Detonation
1924	Charles A. Kraus	The Properties of Non-Aqueous Solutions
1925	E. C. Franklin	The Ammonia System of Compounds
1926	Samuel C. Lind	Chemical Activation by Alpha Particles

Willard Gibbs Medal.—The Willard Gibbs Medal, founded by William A. Converse in 1910, is awarded annually by the Chicago Section of the AMERICAN CHEMICAL SOCIETY to anyone who, on

account of his eminent work in any original contributions to pure and applied chemistry, is deemed worthy of special recognition by the jury of award. A recipient of the medal is expected to give an address upon a chemical subject of his own selection and satisfactory to the jury of award at a meeting of the Chicago Section. The recipients have been as follows:

Recipients of the Willard Gibbs Medal

YEAR	RECIPIENT	TITLE OF RESEARCH
1911	Svante Arrhenius	Electrolytic Dissociation
1912	Theodore W. Richards	Atomic Weights
1913	Leo H. Baekeland	Recent Developments in Phenolic Condensation
1914	Ira Remsen	The Development of Chemical Research in America
1915	Arthur A. Noyes	A System of Qualitative Analysis Including Nearly All the Elements
1916	Willis R. Whitney	Incidents of Applied Research
1917	Edward W. Morley	Early Researches in Hydrogen and Oxygen
1918	Wm. M. Burton	Chemistry in the Petroleum Industry
1919	Wm. A. Noyes	Positive and Negative Valences
1920	F. G. Cottrell	International Scientific Relations
1921	Marie Sklodowska Curie	The Discovery of Radium
1922	No award	
1923	Julius Stieglitz	Theory of Color Production in Dyes
1924	Gilbert N. Lewis	The Molecule as a Magnet
1925	Moses Gomberg	Elements with Abnormal Valence
1926	James C. Irvine	

Finances[1]

The AMERICAN CHEMICAL SOCIETY has been financed almost wholly by American chemists themselves. Membership dues at first were five dollars per member. A little later they were made ten dollars for resident members in New York and five dollars for non-resident members. Subsequently, they were reduced again to five dollars for all members and were maintained at this figure until 1907, when *Chemical Abstracts* was established and the dues were increased to eight dollars. In 1909, with the establishment of the *Journal of Industrial and Engineering Chemistry*, the dues were changed to ten dollars and were continued at this amount until 1921, when increased costs of publication necessitated an additional increase to fifteen dollars.

It has been a fundamental principle of the SOCIETY from the beginning that every member should pay equal dues and be entitled to all of the publications of the general SOCIETY. On this basis the SOCIETY has prospered, and only on this basis

[1] For a full discussion of the SOCIETY's business management and expenditures see *Ind. Eng. Chem.*, News Edition, January 20, 1923.

could the publication of its journals be financed. There is no reduction in dues to the member who wishes to give up one or more of the three journals to which he is entitled. This is because the item of "putting on the press" is by far the largest item of publication. This expense is the same whether one or fifteen thousand copies are printed. It is only because the SOCIETY has so many members that it can offer all three of its journals at a less cost than the price charged for many single journals of smaller size published abroad, where the actual expenses of printing are lower. Accordingly, since all members join in the cost of publication of all three journals and can receive all three if they desire, the overhead for each is decreased. The AMERICAN CHEMICAL SOCIETY has been able to give to its members chemical literature of the highest quality at a cost approximately one-half of that of like journals in any foreign country.

The increase of dues in 1921 came at a very unfortunate time for the SOCIETY, although necessary on account of the increased costs of labor and of paper. It happened to come during our greatest recent industrial depression and at a time when many chemists were thrown out of employment. The SOCIETY had its largest membership in 1920 when the country was unusually prosperous, when all chemists were fully employed, and when dues were only ten dollars a year. The increase to fifteen dollars a year has, however, given the SOCIETY a greater income and has enabled it to continue its publication of the rapidly increasing volume of chemical research.

In 1922 the income of the SOCIETY was not sufficient to meet the estimated budget of its officers, and the Directors felt it necessary to consider a decrease in the allotment of each one of the journals by ten per cent. In this emergency, the Chemical Foundation voluntarily came forward with a donation of twenty-five thousand dollars, and the severe retrenchment was accordingly avoided.

As elsewhere stated, the Chemical Foundation has also guaranteed the publication of the *Journal of Chemical Education* and the *Journal of Physical Chemistry*. In every way this organization has always proved itself a liberal friend of the AMERICAN CHEMICAL SOCIETY and has shown its desire to aid the work and aims of our organization.

At the end of its fifty years, the AMERICAN CHEMICAL SOCIETY has an annual expenditure of $340,000, of which approximately 85 per cent is for the publication of chemical literature. This $340,000 comes from the following sources:

Membership dues	$190,000
Non-member subscriptions	26,000
Sale of back numbers of its periodicals	5,000
Sale of reprints	3,000
Advertising[1]	105,000
Interest	6,000
Payments of foreign postage	5,000

Notwithstanding this large expenditure, the SOCIETY is finding no little difficulty in meeting the expense of adequately recording the results of chemical research in America. In other words, the volume of such research is increasing more rapidly than the income of the SOCIETY. As the publication of this research is only a fraction of one per cent of its material cost, the SOCIETY is making all possible efforts to obtain the necessary funds to insure the carefully edited publication of all worthy material. Among these efforts is an organized movement to obtain for its journals an endowment fund which shall relieve this pressure. Another increase of dues has been contemplated, but it is the judgment of those best informed that to increase the membership dues would in all probability decrease the SOCIETY'S income.

The report of the Finance Committee, dated March 27, 1926,[2] shows that the principal amounts of the various funds of the SOCIETY stand as follows:

MORRIS LOEB FUND ($25,922.25).—This fund was established by a $25,000 bequest of Morris Loeb to the AMERICAN CHEMICAL SOCIETY for the support of a chemical type museum. The income from this fund is paid annually to the National Museum in Washington, which has established the museum, and is carrying out the wishes of Dr. Loeb as indicated in his will.[3]

LIFE MEMBERSHIP FUND ($6,235.04).—This fund is derived from the payments for Life Membership. The income is used to pay the annual dues of the Life Members while living. Any remaining balance can be devoted by constitutional provision to research. Appropriations may be made annually from the unexpended income of this fund, but only for the purposes of chemical research.

PRIESTLEY FUND ($1,115.75).—A fund collected by the Priestley Medal Committee as a basis of the triennial Priestley Medal.

ENDOWMENT FUND ($29,000).—In 1924 it became so evident that the demand upon our publications for space to record the results of chemical research was increasing so much more rapidly than the income of the SOCIETY that it was decided to undertake

[1] Almost wholly in *Industrial and Engineering Chemistry*.
[2] *J. Am. Chem. Soc.*, Proceedings, **48**, 32 (1926).
[3] *Ibid.*, **35**, 71 (1913).

the procurement of an Endowment Fund, the income of which was to be expended solely to help finance the publications of the SOCIETY. The work of the Endowment Committee is progressing, but is not yet well under way. It was deemed desirable first to secure donations from the members of the AMERICAN CHEMICAL SOCIETY, in order that the policy of self-support which the SOCIETY has always maintained may be continued in so far as is possible. Up to the present time subscriptions to the Endowment Fund have only been received from the SOCIETY'S members whose income, for the most part, is limited to their monthly salaries. They have already shown their appreciation of the value of the SOCIETY'S work by the support which they have contributed during five decades and the fruit of their labors is indicated by the results of their almost unaided efforts.

The time has come when the SOCIETY must seek assistance from those who have funds to donate or bequeath for worthy objects. The chemical industries of the country have been so extremely prosperous from the application of the results of chemical research that they will undoubtedly realize the need of this financial support. Surely the country cannot afford to allow worthy chemical advancements and discoveries to go unrecorded. It is the expectation of the SOCIETY that this, its greatest need, will shortly be satisfied by adequate financial support.

GENERAL FUND ($108,656.96).—This is the accumulated surplus of the SOCIETY during its fifty years of existence. It is held as a reserve fund against special need. The interest from the fund is used annually for the current expenses of the SOCIETY.

In addition to its definitely established funds, the SOCIETY has collected advance subscriptions of $66,000 towards publishing the Second Decennial Index to *Chemical Abstracts*, which is almost wholly invested in Liberty Bonds pending its use in 1927. Some $40,000 of this fund will be returned to the treasury toward establishing a revolving fund of $100,000 for printing future Decennial Indexes to *Chemical Abstracts*. Of this amount $35,000 was presented to the SOCIETY for this purpose in 1925 by the International Education Board and $2500 by the du Pont Co.

With the exception of the $25,000 given in 1922 by the Chemical Foundation, the above $35,000 presented by the International Education Board, and certain smaller donations for enabling the SOCIETY to publish the first Decennial Index to *Chemical Abstracts*, the AMERICAN CHEMICAL SOCIETY has been financed from the beginning by the undivided efforts of its members.

Bequests

The AMERICAN CHEMICAL SOCIETY is in a position to receive and administer bequests for any worthy object relating to the advancement of chemistry or chemical research. Two bequests, the Loeb Chemical Type Museum Bequest before mentioned, and the Elizabeth Blee Frasch Bequest, have already been announced. The latter bequest is for one million dollars made to the United States Trust Company for research in the field of agricultural chemistry. The income of the fund is to be allotted, upon the advice of the AMERICAN CHEMICAL SOCIETY, to one or more incorporated institutions in the United States which shall be selected for the purpose. The SOCIETY is also expected to advise every five years as to whether the grant to any particular institution shall be continued or whether the income shall be allotted to others. The SOCIETY has been confidentially informed of three other bequests from donors yet living. The SOCIETY is always ready, without compensation of any kind, to give its services to the administration of any such bequests for the country's development through the aid of chemistry.

War Service of Chemists[1]

It having become apparent early in 1917, through personal contact of the SOCIETY'S officers with European conditions, that the chemists of America were to play a prominent part in the impending war, coöperative arrangements were made with the Bureau of Mines to collate a census of America's chemical personnel. The progress of America's allies in the application of chemistry to offensive and defensive warfare had been greatly handicapped by casualties among some of their most prominent chemists before it was realized that chemical brain power was far more valuable than the physical strength of chemists in the trenches. Science was being used as it never had been used before, and the only means of combating this form of warfare was with scientific, especially chemical, weapons. Already France, England, and Canada had withdrawn all chemists remaining in the service for chemical duty at home.

A census of chemists was accordingly started in February, 1917, giving full data as to the member's age, place of birth, lineage, citizenship, chemical training, experience, etc., in order that the information might be available when needed. Accordingly, detailed information regarding some 17,000 chemists was available when America entered the World War.

[1] *J. Ind. Eng. Chem.*, **10**, 776 (1918); **11**, 413 and 921–24 (1919).

Already, in the early part of February, 1917, the President of the AMERICAN CHEMICAL SOCIETY had offered, without reservation, the services of the AMERICAN CHEMICAL SOCIETY and of all its members to President Wilson for any emergency that might arise. In June, 1917, a committee of the SOCIETY presented a report[1] on "War Service of Chemists" and "A Plan for the Impressment of Chemists and for the Preservation of the Supply of Chemists," in order that America might meet any demand for chemical information, chemical personnel, and chemical production. A large number of the chemists engaged in war work were obtained from the SOCIETY'S classified list. Practically all of the chemists who early entered the service in a commissioned capacity were obtained through the AMERICAN CHEMICAL SOCIETY, and even those who were later engaged were passed upon by the SOCIETY'S officers.

When the Bureau of Mines began its investigations on gas warfare the SOCIETY'S classified list was invaluable, and representatives from practically all of the Government bureaus and departments in Washington used it freely as their needs increased. The demand for chemists became so great that a little later, through the far-sighted assistance of Secretary Crowell, all chemists being drafted or inducted into the Army were withheld for chemical service. From the first, the chemical personnel in the Army and Navy and in the civilian bureaus was partly civilian and partly military. As the war progressed and men were taken from the Army and assigned to chemical duty the proportion of chemists in uniform naturally increased. The investigations of gas warfare, which had reached a high state of efficiency with over 700 chemists and 1100 helpers under the direction of the Bureau of Mines, coöperating with the chemical service of the Army, were later taken over by the newly formed Chemical Warfare Service in June, 1918, and a goodly portion of the chemists wore its uniform.

Throughout the war the AMERICAN CHEMICAL SOCIETY maintained an office in Washington for its Committee on War Service for Chemists. This office was continually consulted by the War and Navy Departments when in need of chemical personnel or chemical assistance.

It was a real event in the history of chemistry when, as a result of conferences held at the Bureau of Mines with officers of the Medical Corps, War College, General Staff, Navy and civilian chemists, the Chemical Service Section was established as a unit of the Army. This was the first recognition of chemistry as a separate branch

[1] *J. Ind. Eng. Chem.*, **9**, 639 (1917).

of the military service of any country in any war. Later, the Chemical Service Section, all the gas research laboratories and personnel of the Bureau of Mines, and the plant and field operations of the Ordnance and Medical Departments pertaining to gas warfare were united under the new title of "Chemical Warfare Service." In recognition of its direct growth from the efforts of the AMERICAN CHEMICAL SOCIETY, the new Chemical Warfare Service adopted for its colors those of the AMERICAN CHEMICAL SOCIETY, cobalt blue and gold.

The influence of the AMERICAN CHEMICAL SOCIETY and its help to America in the war have been told in detail in many articles appearing in *Industrial and Engineering Chemistry*. They naturally need not be repeated here. It is perhaps quite sufficient to say that the American chemist fully met his obligations. The chemical program of the United States Army and Navy exceeded at all times the requirements of our trained man-power in the mechanical devices necessary to apply what the chemists of America had produced.

When the war closed there were, according to the SOCIETY'S record, 4003 chemists in uniform serving in a chemical capacity. In addition, there was fully an equal number serving as civilians in laboratories supported by or under the auspices of the Government. The rest of the members of the AMERICAN CHEMICAL SOCIETY had remained through necessity in the country's chemical and munition plants by direction of the Government in order that these important supplies might not be lacking. All American chemists were in service.

The Secretary of War[1] in a public address stated:

> The AMERICAN CHEMICAL SOCIETY presented a striking instance of preparedness. It certainly had the largest body of its kind in the world and comprised in its ranks 14,500 of the 17,000 chemists of the country, and when the country's call went out for chemists the coöperation of this SOCIETY was a splendid substitute for any preparation the Government had to make. Almost instantly the Government was able to put its hand on the man who was needed for the particular job, to call him to Washington or service wherever he might be needed. Your SOCIETY was by its very existence anticipatory of the calling into being of the forces to collect these data, and the Government owes to this SOCIETY, therefore, a debt of gratitude for this closeness of association and intimate knowledge of the profession, which it was able to place at the Government's disposal and thereby to render the chemical knowledge of the country speedily available. The chemists did their share. They did it superbly.

The AMERICAN CHEMICAL SOCIETY sincerely trusts that it may never again be called upon to perform a similar service, but if it is so called its members will be found ready to serve their country in every field of duty.

[1] *J. Ind. Eng. Chem.*, **11**, 921–24 (1919).

Milestones of Progress

The following are the chief milestones marking the steps of the SOCIETY'S progress:

Foundation, April 20, 1876.
Incorporation, November 9, 1877.
Journal of the American Chemical Society, January 1, 1879.
Reorganization on national basis, 1891.
First local section, January 21, 1891.
Chemical Abstracts, January 1, 1907.
Divisional organization, 1908.
Industrial and Engineering Chemistry, January 1, 1909.
Organization for national war service, 1917.
News Service, 1917.
Monographs, 1920.
News Edition, 1923.
Regional meetings, 1923.
Journal of Chemical Education, 1924.
Chemical Reviews, 1924.
Separate divisional meetings, 1925.

The Future

The AMERICAN CHEMICAL SOCIETY is justly proud of its growth and accomplishments during its fifty years of existence. They have been sketched all too briefly in the present review. The future of the SOCIETY is bright. The accomplishments of the past are small in comparison with the unlimited opportunities of the future. Chemistry, probably more than any other science, will point the way, and guide the steps, of our country's progress. The application of chemical research to the increase of the knowledge of mankind, to the development of our country's industries, and to the material prosperity and happiness of our people, is certain to bring results beyond the power of our present vision.

That increasing opportunities for service will come to the SOCIETY cannot be doubted. The problems and the duties of the future will be met as they arise. It has grave problems before it to meet the cost of recording the results of the activities which it itself catalyzes. The SOCIETY has within its membership all of the leading chemists of America. They constitute a body of scientists which is growing in numbers, in prestige, and in knowledge. There are no educational institutions in the world better equipped to turn out qualified chemists than those of America.

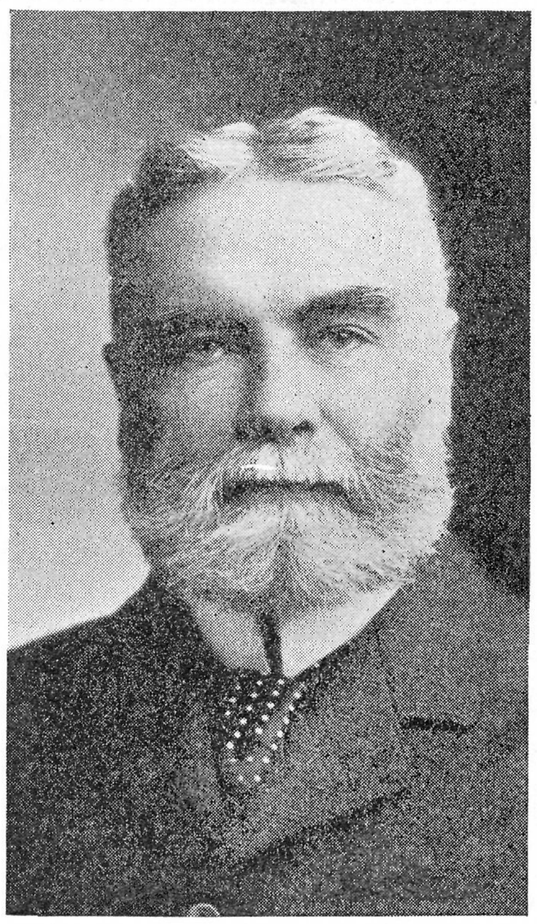
The chemists of America are united in the AMERICAN CHEMICAL SOCIETY. They will not fail, individually or collectively, to contribute their share to the future progress of our country and the world!

Harris & Ewing

CHARLES E. MUNROE
(1849–)
President 1898

Alman & Co.

EDWARD W. MORLEY
(1838–1923)
President 1899



WILLIAM MCMURTRIE
(1851–1913)
President 1900

Harris & Ewing

FRANK W. CLARKE
(1847–)
President 1901

C. E. Munroe was also a Charter Member; F. W. Clarke attended the Priestley Centennial in 1874.