

One Hundred Years of the Division of Agricultural and Food Chemistry

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INTRODUCTION

The Division of Agricultural and Food Chemistry (AGFD) of the American Chemical Society (ACS) celebrated its 100th anniversary in 2008. Several histories of AGFD from different perspectives have appeared over the years, the latest being a 2002 article by Harold Pattee on the occasion of the 50th anniversary of the *Journal of Agricultural and Food Chemistry* (1). That paper focused on the activities of AGFD in the postwar era; the present paper will deal more with the formation and early years of the division.

SECTION FOUNDED

The American Chemical Society (ACS) was founded in 1876 and met in the summer and in December each year starting with Newport, RI, and Philadelphia, PA, meetings in 1890 (2). During the next three decades, ACS often met in conjunction with Section C (chemistry) of the American Association for the Advancement of Science (3). Originally, all of the papers were presented in general sessions, but this arrangement became impractical as ACS grew. As stated in the November 18, 1904, issue of *Science*: “Owing to the large number of papers annually presented ... and the utter impossibility of reading them all ... a radical change has been adopted” (4). Beginning with the December 1904 meeting in Philadelphia, papers were categorized into sections, each chaired by an expert in the field. Following welcoming speeches and an address by the president of ACS, members attended presentations in their areas of interest. The initial sections were Industrial Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, and Agricultural, Sanitary and Physiological Chemistry (5). The latter was chaired by William Pitt Mason, the founder and first head of the chemistry and chemical engineering departments at Rensselaer Polytechnic Institute. Mason was a chemist, engineer, and medical expert who was a pioneer for pure municipal water supplies (6). Nine papers were presented in the section, six of them dealing with water (5).

The section experienced name changes over the next few years, with “physiological” being dropped in December 1905 and “biological” being added in the summer of 1907 (7). The section was headed in 1905 by two former ACS presidents, John H. Long of Northwestern University, who had served as president in 1903, and Harvey Washington Wiley, the chief of the USDA’s Bureau of Chemistry (predecessor of the FDA) and ACS president in 1893.

The next three chairs were Edward B. Voorhees (Director, New Jersey Agricultural Experiment Station), Lucius Lincoln van Slyke (Chief Agricultural Chemist, New York Agricultural Experiment Station), and Frank T. Shutt (Canadian Department of Agriculture). “Food” appeared in the section name for the first time in December 1907 when the Section of Agricultural, Sanitary, and Food Chemistry was led by Willard D. Bigelow (Assistant Chief, USDA Bureau of Chemistry) (7). The name was at last shortened in 1908 to the Section of Agricultural and Food Chemistry and was chaired at the summer meeting by Andrew Lincoln Winton (Chief, Chicago Food and Drug Laboratory, USDA Bureau of Chemistry) and in December by Homer Jay Wheeler (Director, Rhode Island Experiment Station) (7).

The first divisions in ACS were formed in 1908 after successful section meetings proved a need for them (2). Homer Wheeler, representing a committee of 10, presented ACS Council with a request for the formation of the Division of Agricultural and Food Chemistry at the Baltimore meeting on December 30, 1908. The request was promptly granted, and AGFD was born (2, 7).

AGFD BEGINS

Figure 1 shows the first AGFD program, which took place at the summer 1909 meeting in Detroit, MI. Willard D. Bigelow, the December 1907 section chair, served as the first AGFD chair, and William B. D. Penniman was the first secretary. Penniman had founded a laboratory testing and civil engineering firm, Penniman & Browne, Inc., in Baltimore, MD, in 1896, and the firm is still in business. The first paper, “The distillation of whiskey,” was presented by Arthur B. Adams, the Chief Chemist of the Internal Revenue Service through the early Prohibition days, when that agency dealt with identifying illegal alcoholic products (9). The next two papers were given by former section chair L. L. Van Slyke, a noted dairy chemist whose formula for cheese yield is still in use (10). The fourth paper was presented by Elmer Verner McCollum, who was to become one of the most celebrated members of the division. McCollum established the first rat colony for nutritional research in the United States, was the codiscoverer of vitamin A at the University of Wisconsin in 1912, and was the codiscoverer of vitamin D at Johns Hopkins University in 1922. He also devised the letter names for vitamins (11). The next two papers were delivered by John Pearce Mitchell, who was at Stanford University as a student, chemistry instructor, and registrar from 1899 to 1973. He also served two terms as Palo Alto mayor in the early 1950s and has a prominent public park named for him (12). He was followed in the program

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PROGRAM OF THE FORTIETH GENERAL MEETING OF THE AMERICAN CHEMICAL SOCIETY HELD AT DETROIT, MICHIGAN.
From Tuesday June 29 to Friday July 2, 1909.

DIVISION OF AGRICULTURAL AND FOOD CHEMISTS.
W. D. BIGELOW, *Chairman.*
W. B. D. PENNIMAN, *Secretary.*

PAPERS.

1. A. B. Adams. "The Distillation of Whiskey." (30 min.)
2. L. L. Van Slyke. "The Chemistry of Milk." (30 min.)
3. L. L. VanSlyke and A. W. Bosworth. "Volumetric Method for Determining Casein in Milk."
4. E. V. McCollum and W. E. Tottingham. "A Chemical Study of the Interaction of Fermenting Manures and Ground Rock Phosphate." (10 min.)
5. J. Pearce Mitchell. "Determination of Nitrates in Potable Waters with High Chloride Content."
6. J. Pearce Mitchell. "Normal Chloride Content of Surface Waters on the San Francisco Peninsula."
7. Hermann C. Lythgoe. "The Relation between the Calcium and the Fat Content of Cream." (5 min.)
8. Edmund Clarke. "The Determination of Benzoic Acid in Food Products."
9. G. H. Failyer and W. H. Waggaman. "The Estimation of Organic Matter in Soils." (10 min.)
10. F. K. Cameron and W. O. Robinson. "The Relation of the Iron Content to the Color of Soils." (10 min.)
11. H. E. Patten. "The Relation of Moisture Content to the Heat Conductance of Soils." (15 min.)
12. C. G. Hopkins. "The Element System of Nomenclature in Soil Chemistry." (20 min.)
13. G. S. Fraps. "The Interpretation of Soil Analyses with Respect to Phosphoric Acid." (10 min.)

Figure 1. First half of the initial AGFD program in 1909 (8).

by Herman C. Lythgoe of the Massachusetts Department of Public Health.

The first AGFD business meeting, held in conjunction with papers, took place in Boston, MA, on December 30, 1909 (Figure 2). The first paper there was read by Ellen Henrietta Richards, who in 1870 became the first American woman to earn a degree in chemistry. In fact, she was the first woman admitted to any U.S. school of science and technology when she entered the Massachusetts Institute of Technology. Richards established the field of home economics and was the first female industrial chemist and foremost environmental chemist in the United States in the 19th century (14). Other notables who presented their research in AGFD programs during the first two years included Charles Albert Browne, the first vice-chair of AGFD, the cofounder of the Carbohydrate and History of Chemistry Divisions, and a successor of Harvey Wiley as Bureau of Chemistry chief; Harry Everett Barnard, Indiana State Food and Drug Commissioner, crusader for pure food, and AGFD chair in 1911–1913; Edgar Henry Summerfield Bailey, the first (and, for many years, only) chemistry professor at the University of Kansas and the founder of the first state board of health in the United States; and George A. Soper, a New York sanitation engineer who had tracked down "Typhoid Mary" Mallon, the source of several typhoid fever outbreaks, in 1906.

FORMATIVE YEARS

Forty-six papers were presented in 1909, the first year of AGFD programming. Between 26 and 39 talks were delivered annually over most of the next 12 years. Papers were presented during the divisional business meetings (following committee reports and election of officers) as specified in the by-laws, which were first drafted in 1912 (15). A Division of Water, Sewage, and Sanitation Chemistry (now the Division of Environmental Chemistry) was started in 1915 (2), which diverted papers dealing

DIVISION OF AGRICULTURAL AND FOOD CHEMISTS OF THE AMERICAN CHEMICAL SOCIETY.
BOSTON MEETING.

FIRST MEETING, THURSDAY, DECEMBER 30TH.

The meeting was called to order by the Chairman, Dr. W. D. Bigelow, at 11 A.M. There being no objections the Chairman made the election of officers for the ensuing term, a special order for 3:30 P.M. Thursday, December 30th.

On motion of S. H. Ross, a Nominating Committee of three was appointed by the Chairman, this committee being instructed to present nominations for officers for the ensuing term. The Nominating Committee was composed of Alfred Springer, Herman H. Hanson, and B. H. Smith.

In the absence of the Secretary of the Division, Dr. W. D. B. Penniman, the Chairman appointed M. Dorset acting secretary.

At the conclusion of this preliminary business the Chairman's address, entitled "The Construction and Installation of a Technical Laboratory," was delivered by Dr. W. D. Bigelow. At the conclusion of this address the following papers were read:

Ellen H. Richards. "Application of Electricity to Apparatus for Water Analysis."
Herman C. Lythgoe. "The Composition of Milk."
P. H. Smith and J. C. Reed. "The Use of the Refractometer in Detecting Added Water in Milk."

Adjourned until 2:30 P.M.

AFTERNOON SESSION.

Meeting called to order at 2:30 P.M.

The following papers were read:

W. D. Richardson. "The Separation of Colloids from Solution by Freezing and Some Practical Results."
C. S. Hudson. "The Determination of Cane Sugar by the Use of Invertase."

Figure 2. First business meeting of AGFD in 1910 (13).

FIFTY-SIXTH MEETING AMERICAN CHEMICAL SOCIETY CLEVELAND, SEPTEMBER 9-13, 1918

PROGRAM OF PAPERS

GENERAL SESSION¹

Address of Welcome. A. W. SMITH.
Response. H. S. MINER.
The American Chemist's Place in Warfare. CHARLES L. PARSONS, Chairman Committee on War Service for Chemists.
The Work of the Chemical Section of the War Industries Board. CHAS. H. MACDOWELL, Director of Chemicals Division, War Industries Board.
War Disturbances and Peace Readjustments in the Chemical Industries. GRINNELL JONES, Chemist, Tariff Commission.
Chemical Warfare Research. WILDER D. BANCROFT, Chemical Warfare Service.
The Place of the University in Chemical War Work. EDWARD W. WASHBURN, National Research Council.
President's Address—A Retrospect and an Application. WILLIAM H. NICHOLS.

AGRICULTURAL AND FOOD CHEMISTRY DIVISION

T. J. BRYAN, *Chairman* F. F. FLANDERS, *Secretary*

1. Some Chemical and Economic Aspects of the American Food Supply. H. C. SHERMAN.
2. The Role of Oxidases and of Iron in the Color Changes of Sugar Cane Juice. F. W. ZERBAN. (See p. 814, this issue.)
3. A Centrifugal Method for the Separation of Cottage Cheese Curd from Buttermilk. A. E. PERKINS.
4. Influence of Conditions upon the Polarizing Constants of Sugar Cane Products. C. A. BROWNE.
5. The Effect of Manganese on the Growth of Wheat; Basic Slag a Source of Manganese. (Lantern.) J. S. MCHARGUE.
6. A Comparison of Barium Sulfate Results on Feeds and Feces by the Benedict Wet Solution Method (Wolf and Ostenberg) with the Modified Sodium Peroxide Method, Silica Being Removed. J. O. HALVERSON.
7. The Thermo-Stability of the Water-Soluble Vitamines. A. D. EMMERT AND G. OXSWORN.

Figure 3. AGFD programming at its 10th anniversary in 1918 (16).

with those subjects from AGFD; nevertheless, AGFD continued to prosper.

ACS shifted to March–April and August–September meetings starting in 1913. The opening of the meeting closest to AGFD's 10th anniversary, in September 1918, is shown in Figure 3. One can see that chemical warfare was on the minds of scientists during the closing days of World War I. The fifth

Table 1. Chairs and Secretary-Treasurers of the Division of Agricultural and Food Chemistry^a

term	chair	affiliation during term
1909	Willard D. Bigelow	USDA, Bureau of Chemistry
1910	Charles D. Woods	Maine Agricultural Experiment Station
1911–1913	Harry E. Barnard	Indiana State Food Commission
1914–1915	Floyd W. Robinson	Michigan Dairy and Food Commission
1916	Lucius M. Tolman	USDA, Bureau of Chemistry
1917–1918	Thomas J. Bryan	State Chemist of Illinois
1919	William D. Richardson	Swift & Co.
1920–1921	Charles E. Coates	Louisiana State University
1922	Thomas J. Bryan	State Chemist of Illinois
1923	Harry A. Noyes	Mellon Institute of Industrial Research
1924–1925	Clyde H. Bailey	Minnesota Agricultural Experiment Station
1926–1927	Edward F. Kohman	National Canners Association
1928–1929	Frederick C. Blanck	USDA, Bureau of Chemistry and Soils
1930	Ruric C. Roark	USDA, Bureau of Chemistry and Soils
1931	James S. McHargue	Kentucky Agricultural Experiment Station
1932–1933	Henry A. Schuette	University of Wisconsin
1934–1935	Donald K. Tressler	New York State Agricultural Experiment Station
1936	John H. Nair	Borden Co.
1937–1938	Henry R. Kraybill	Purdue University
1939	Roy C. Newton	Swift & Co.
1940	Charles N. Frey	Standard Brands, Inc.
1941	Gerald A. Fitzgerald	General Foods, Inc.
1942–1943	Ellery H. Harvey	Consultant
1944–1946	Nollie B. Guerrant	Pennsylvania State College
1947	Bernard L. Oser	Food Research Laboratories, Inc.
1948	Paul Logue	Monsanto
1949	Carl R. Fellers	University of Massachusetts
1950	LaVerne E. Clifcorn	National Can Corp.
1951	Bernard E. Proctor	Massachusetts Institute of Technology
1952	Asger F. Langlykke	Squibb Institute for Medical Research
1953	Arthur N. Prater	C. B. Gentry Co.
1954	Clair S. Boruff	Hiram-Walker
1955	Walter O. Lundberg	Hormel Institute
1956	A. Larry Elder	Corn Products Refining Co.
1957	Dilbert M. Doty	American Meat Institute Foundation
1958	Herbert L. Haller	USDA, Bureau of Entomology and Plant Quarantine
1959	Frank M. Strong	University of Wisconsin
1960	Lloyd W. Hazelton	Hazelton Laboratories
1961	Leonard S. Stoloff	Marine Colloids, Inc.
1962	John C. Sylvester	Abbott Laboratories
1963	Herbert E. Robinson	Swift & Co.
1964	J. Wade Van Valkenburg	Dow Chemical Co.
1965	John F. Mahoney	Merck and Co.
1966	Louis Lykken	University of California at Berkeley
1967	Floyd L. Kauffman	Swift & Co.
1968	Daniel MacDougall	Chemagro Corp.
1969	Kenneth Morgareidge	USDA, Human Nutrition Research Division
1970	Irwin Hornstein	USDA, Human Nutrition Research Division
1971	Emily L. Wick	Massachusetts Institute of Technology
1972	Stanley J. Kazeniak	Campbell Institute for Food Research
1973–1974	George E. Inglett	USDA, Northern Regional Research Center
1975	Richard J. Magee	American Cyanamid Co.
1976	Roy Teranishi	USDA, Western Regional Research Center
1977	Michael E. Mason	International Flavors and Fragrances, Inc.
1978	Robert E. Feeney	University of California at Davis
1979	George Charalambous	Anheuser-Busch
1980	Robert L. Ory	USDA, Southern Regional Research Center
1981	Irvin E. Liener	University of Minnesota
1982	Akiva Pour-El	Archer Daniels Midland Co.
1983	Steven Nagy	Florida Department of Citrus
1984	John R. Whitaker	University of California at Davis
1985	Ira Katz	International Flavors and Fragrances, Inc.
1986	John P. Cherry	USDA, Eastern Regional Research Center
1987	John P. Zikakis	University of Delaware
1988	John W. Finley	Nabisco Brands
1989	Marshall Phillips	USDA, National Animal Disease Center
1990	Terry E. Acree	Cornell University
1991	Charles J. Brine	FMC Corp.

Table 1. Continued

term	chair	affiliation during term	
1992	Glenn Fuller	USDA, Western Regional Research Center	
1993	Richard A. Scanlan	Oregon State University	
1994	Robert J. McGorin	Kraft General Foods	
1995	David J. Armstrong	FDA, National Center for Food Safety and Technology	
1996	Chi-Tang Ho	Rutgers University	
1997	Sara J. Risch	Science by Design	
1998	Harold E. Pattee	USDA, North Carolina State University	
1999	Russell L. Rouseff	University of Florida	
2000	Michael J. Morello	Quaker Oats	
2001	Michael H. Tunick	USDA, Eastern Regional Research Center	
2002	Fereidoon Shahidi	Memorial University of Newfoundland	
2003	Carl Frey	Pepsi-Cola Co.	
2004	Wallace H. Yokoyama	USDA, Western Regional Research Center	
2005	Keith R. Cadwallader	University of Illinois at Urbana—Champaign	
2006	Jane V. Leland	Kraft Foods	
2007	Agnes M. Rimando	USDA, Natural Products Utilization Research	
2008	Bhimanagouda S. Patil	Texas A&M University	
2009	Deepthi K. Weerasinghe	Pepsi-Cola Co.	

term	secretary-treasurer	term	secretary-treasurer
1909	William B. D. Penniman	1955–1957	Frank M. Strong
1910–1911	Bert E. Curry	1958–1959	John H. Nair III
1912–1917	Glen F. Mason	1960–1961	Robert W. Thomas
1918	Fred F. Flanders	1962–1963	J. Wade Van Valkenburg
1919–1921	Thomas J. Bryan	1964–1965	Floyd L. Kauffman
1922–1927	Clement S. Brinton	1966	John H. Nair III
1928–1930	Henry A. Schuette	1967	Robert J. Weir
1931–1934	John H. Nair	1968–1970	Richard J. Magee
1935–1936	Henry R. Kraybill	1971–1974	Michael E. Mason
1937–1939	Gerald A. Fitzgerald	1975–1976	George Charalambous
1940	Ellery H. Harvey	1977–1978	Akiva Pour-El
1941	Carl R. Fellers	1979–1998	Cynthia J. Mussinan
1942–1943	Roger H. Lueck		
1944–1946	Paul Logue		treasurer
1947–1948	LaVerne E. Clifcorn	1999–date	Cynthia J. Mussinan
1949–1951	Arthur N. Prater		
1952	Louis B. Howard		secretary
1953–1954	Dilbert M. Doty	1999–2002	Sara J. Risch
		2003–date	Michael H. Tunick

^aThe position of secretary-treasurer was split in 1999.

AGFD paper, given by future division chair James S. McHargue, bears the notation “lantern.” It was the first talk in AGFD, and one of the first in ACS, to be accompanied by lantern slides, which were 89 × 102 mm glass photographic plates projected on a screen by electric light (17). Previously, talks were not accompanied by visual aids, but within a few years most were “illustrated”.

After 15 successful years, the number of papers presented in AGFD dwindled in the mid-1920s, bottoming out with only four papers at the Fall 1927 meeting (18). The division looked into, but decided against, a merger with the Division of Biological Chemistry, determining that AGFD’s research scope was too broad for biological chemists (7). Revitalization quickly followed, as active members were solicited through *Industrial and Engineering Chemistry News Edition* (the forerunner of *Chemical and Engineering News*). Dues were collected and used for premeeting distribution of mimeographed abstracts, which increased interest in the programming (7). Another future AGFD chair, Ruric C. Roark, organized and presided over a 42-paper symposium on pesticides in 1928 (7, 18), confirming the vitality of the division. AGFD began to sponsor multiple symposia in each ACS National Meeting starting in the early 1930s and, inspired by Elmer McCollum’s work, held 10 symposia on vitamins from 1935 to 1940. Over 140 symposia were presented in the first 50 years of the division (7).

GOVERNANCE

When AGFD began, the officers included a chairman and vice-chairman (ACS did not remove gender-specific language until the late 1970s), recording secretary, and two other executive committee members (12). Officers served one-year terms, and all but the secretary were limited to two terms. Some changes were made over the years, such as the addition of councilors in the 1940s and the inclusion of a chairman-elect between the top two positions in 1950. The start of subdivisions (Fermentation in 1946, Pesticides in 1950, and Flavor in 1965) stimulated interest in organizing symposia, causing more members to become involved. In fact, the Fermentation Subdivision grew into its own division in 1961 and is now the Division of Biochemical Technology, and the Pesticides Subdivision split off in 1968 and is now the Division of Agrochemicals (1). The Flavor Subdivision is still quite active, with 16 of their chairs having gone on to become chairs of the division. The Functional Foods & Natural Products Subdivision was formed in 2001 and also plays a vital role in AGFD.

Throughout the past 100 years, some industry members of ACS have believed that members from academia exert too much control over governance (19). AGFD addressed that issue in the late 1970s when a rotation system for the division chair was

Table 2. Division of Agricultural and Food Chemistry (AGFD) Award Winners

Award for the Advancement of Application of Agricultural and Food Chemistry, administered by AGFD and sponsored by International Flavors and Fragrances, Inc.
Purpose: to recognize and encourage outstanding contributions to pure and/or applied agricultural and food chemistry
Prize: \$1000, an engraved plaque, and an allowance to cover the traveling expenses of the awardee to the ACS Fall National Meeting at which the Award will be presented

1973	Larry Elder	1991	Aloys L. Tappel
1974	Frank Strong	1992	Gary A. Reineccius
1975	Stuart Patton	1993	Charles V. Morr
1976	Harold Olcott	1994	Harold E. Swaisgood
1977	Leonard Jurd	1995	Owen Fennema
1978	Robert E. Feeney	1996	Sigmund Schwimmer
1979	Thomas Jukes	1997	Ron Buttery
1980	Dexter French	1998	Russell J. Molyneux
1981	Hisateru Mitsuda	1999	Soichi Arai
1982	Irvin E. Leiner	2000	Mendel Friedman
1983	George E. Inglett	2001	Shin Hasegawa
1984	Yeshajahn Pomeranz	2002	Harold Pattee
1985	John R. Whitaker	2003	Donald W. Thayer
1986	Thomas Mabry	2004	Shuryo Nakai
1987	Eric Block	2005	Chi-Tang Ho
1988	John H. Bremner	2006	David Julian McClements
1989	Roy Teranishi	2007	Fereidoon Shahidi
1990	John E. Kinsella	2008	Donald S. Mottram

AGFD Fellow Award, sponsored by AGFD**Purpose:** to recognize outstanding scientific contributions to the field of agricultural and food chemistry**Prize:** the winner receives an engraved plaque at the ACS Fall National Meeting

1988	Robert E. Feeney, Chi-Tang Ho, Herbert O. Hutlin
1989	Mendel Friedman, Robert Ory, Harold Pattee, Roy Teranishi
1990	Owen Fennema, John Finley, Steven Nagy, John Whitaker
1991	Marshall L. Fishman, Chang Y. Lee, Braja D. Mookherjee, Takayuki Shibamoto
1992	Mitsuo Namiki, Wassef Nawar, Russell Rouseff
1993	Eric Block, Phillip E. Shaw, Harold E. Swaisgood
1994	Ron Buttery, Richard A. Scanlan, Fereidoon Shahidi
1995	John P. Cherry, William Moats, George E. Inglett
1998	Irwin E. Leiner, Tung-Ching Lee, Ron Wrolstad
1999	Terry E. Acree, E. Allen Foegeding, Donald S. Mottram, Gary Takeoka
2000	Shin Hasegawa, Paul Hedin, Thomas H. Parilment
2002	Srinivasan Damodaran, Karl-Heinz Engel, Matthias Guntert, Robert Rosen, Dominic Wong
2004	Gary A. Reineccius
2005	Gow-Chin Yen
2006	Casimir Akoh, James Seiber, Andrew Taylor
2007	Peter Schieberle
2008	Thomas Hofmann, Rui-Hai Liu

Roy Teranishi Graduate Fellowship in Food Chemistry, sponsored by AGFD**Purpose:** to fund original graduate school research**Prize:** a one-time fellowship award of \$2500

2002	Alberto Sun, University of California—Davis
2003	April M. Elston, University of Florida
2004	Caitlan S. Boon, University of Massachusetts
2005	Yuko Noda, Pennsylvania State University
2006	Yu Wang, Rutgers University
2007	Patricio Lozano, University of Illinois
2008	Imelda Ryona, Cornell University

Withycombe—Charalambous Award for Excellence in Graduate Research in Agricultural or Food Chemistry, sponsored by AGFD and ACS Books**Purpose:** to showcase the research talents of graduate degree candidates to prospective employers.**Prize:** judges for this award choose six students to participate in the symposium; those students receive travel expenses up to \$750 to attend and present their research at the ACS Spring National Meeting; the first-place winner, as chosen by the judges, receives a cash award of \$750 and a plaque; the second-place winner receives a cash award of \$250

1986	Charles J. Belunis, Rutgers University
1987	Frank J. Miskiel, Pennsylvania State University
1988	Denise L. King, University of Illinois, and Todd Gusek, Cornell University
1989	James M. Carr, Cornell University, and Gregory C. Mattern, Rutgers University
1990	Aswathi Ann George, University of California—Berkeley, and James E. Hauschild, Rutgers University
1991	Cynthia F. Ridenour, Colorado State University, and Belinda Vallejo-Córdoba, University of British Columbia
1992	Ana Bravo, Cornell University, Sriram Naganathan, State University of New York—Albany, and Marie K. Walsh, North Carolina State University

Table 2. Continued

1993	Deborah D. Roberts, Cornell University
1994	Naina K. Shah, Rutgers University
1995	Ellen C. Hopmans, Iowa State University
1996	Chen-Mu Foster, Rutgers University
1997	Yuhan Chen, Rutgers University
1998	Prasanthi Jella, University of Florida
1999	Darcy Driedger, University of Alberta
2000	Shawna L. Lemke, Texas A&M University
2001	S. P. Janaka Namal Senanayake, Memorial University of Newfoundland
2002	Xiofeng Meng, Rutgers University
2003	Nathan V. Matusheski, University of Illinois
2004	Haiqing Yu, Rutgers University
2005	Dapeng Chen, Rutgers University
2006	Amanda B. Newell, University of Illinois
2007	Jeffrey Moore, University of Maryland
2008	Christina Kriegel, University of Massachusetts

AGFD Young Scientist Award, sponsored by AGFD**Purpose:** to recognize outstanding scientific contributions of scientists early in their careers to the field of agricultural and food chemistry**Prize:** \$1000, an engraved plaque, and an allowance to cover the traveling expenses of the awardee to the ACS Fall National Meeting at which the Award will be presented

1992	Shelly Schmidt, University of Illinois—Champaign
1993	Michael J. McCarthy, University of California—Davis
1994	Eric Decker, University of Massachusetts—Amherst
1995	Thomas G. Hartman, Rutgers University
1996	David Julian McClements, University of Massachusetts—Amherst
1997	Youling L. Xiong, University of Kentucky—Lexington
1998	Lauren S. Jackson, U.S. Food and Drug Administration, Center for Food Safety
1999	Thomas F. Hofmann, German Research Center for Food Chemistry
2000	Susan Ebeler, University of California—Davis
2004	Bhimanagouda S. Patil, Texas A&M University
2005	Andrew P. Breksa III, U.S. Department of Agriculture, Albany, CA
2006	Liangli Yu, University of Maryland
2007	Sheng Min Shan, Rutgers University
2008	James Kennedy, Oregon State University

Award for Distinguished Service to the Division of Agricultural and Food Chemistry, sponsored by AGFD**Purpose:** to recognize substantial and sustained service to the Division**Prize:** the winner receives an engraved plaque at the ACS Fall National Meeting

1984	George Charalambous, George E. Inglett, Daniel MacDougall, J. Wade Van Valkenburg, Emily L. Wick
1985	Ira Hornstein, Roy Teranishi, Leonard S. Stoloff
1986	Constance V. Kies, Stanley J. Kazeniac, Virginia H. Holsinger, Robert L. Ory, Robert E. Feeney, Cynthia J. Mussinan
1987	Harry J. Prebluda, Ira Katz, Steven Nagy
1988	Richard A. Scanlan, Harold Pattee, Donald Withycombe
1989	Irvin E. Liener, John R. Whitaker
1990	John P. Cherry, John W. Finley
1991	Terry E. Acree, Marshall Phillips, John P. Zikakis
1992	Charles J. Brine
1999	Glenn Fuller, Robert McGorin, Sara Risch
2000	Chi-Tang Ho, William Moats, Thomas H. Parliment
2001	David J. Armstrong, Richard Petroski
2004	Karl-Heinz Engel, Carl Frey, Michael H. Tunick
2005	Michael J. Morello
2008	Fereidoon Shahidi

Sterling B. Hendricks Memorial Lectureship Award, cosponsored by the Agricultural Research Service (ARS) of the U.S. Department of Agriculture, the ACS Division of Agrochemicals (AGRO), and AGFD; the lectureship is presented at an AGFD symposium in even-numbered years and in an AGRO symposium in odd-numbered years**Purpose:** to recognize scientists who have made outstanding contributions to the chemical science of agriculture; Dr. Hendricks contributed to many diverse scientific disciplines, including soil science, mineralogy, agronomy, plant physiology, geology, and chemistry; he is most frequently remembered for discovering phytochrome, the light-activated molecule that regulates many plant processes**Prize:** the lecture, on a scientific topic, trend, or policy issue of the lecturer's choice, will be presented at the ACS Fall National Meeting; the award includes an honorarium of \$2000, a bronze medallion, and expenses to present the lecture; all of these costs are borne by ARS, which selects the winner

1981	Norman E. Bourlag	1995	Winslow R. Briggs
1982	Warren L. Butler	1996	Hugh D. Sisler
1983	Melvin Calvin	1997	Ernest Hodgson
1984	Frederick Ausubel	1998	Martin Beroza
1985	Alan Putnam	1999	Bruce D. Hammock
1986	Ralph Hardy	2000	William S. Bowers

Table 2. Continued

1987	Mary-Dell Chilton	2001	Malcolm J. Thompson
1988	Bruce N. Ames	2002	Irvin E. Liener
1989	Sanford A. Miller	2003	Kriton K. Hatzios
1990	Roy L. Whistler	2004	Robert L. Buchanan
1991	Peter S. Eagleson	2005	Donald L. Sparks
1992	John E. Casida	2006	Stanley Prusiner
1993	Philip H. Abelson	2007	Bruce E. Dale
1994	Wendell L. Roelofs	2008	Fergus M. Clydesdale

established. From then on, the position has been filled by a member from academia one year, industry the next, and government the next (Table 1). Thus, the chair, chair-elect, and vice-chair have each belonged to a different sector of membership.

TODAY AND TOMORROW

Exactly 300 papers were presented in AGFD sessions from 1909 through 1920 inclusive. That total has been equaled or surpassed each year since 2000; there were over 400 talks and posters in each of the past three years. Today, AGFD continues its work by disseminating information through presentations, ACS Symposium Series Books, and the *Journal of Agricultural and Food Chemistry*; recognizing outstanding members and promising students through its awards program (Table 2); and offering a place for agricultural and food chemists to network and exchange ideas. Its Website (20) is constantly being updated to provide its members, other scientists, and the public with accurate information. AGFD will continue its proud tradition of developing focused and timely programs, products, and services that engage those involved in agriculture, food chemistry, and related fields.

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