

## 1919–1928: A new decade, The Society of Cottonseed Products Analysts bad prospered during its first decade Mem-

had prospered during its first decade. Membership was approaching 200. A one-day annual meeting no longer provided enough time to cover all the topics to be discussed. Members were analyzing more than cottonseed and cottonseed derivatives. The quarterly Chemists' Section of Cotton Oil Press no longer could accommodate all the material the group wanted to publish.

#### George Willhite

The Society of Cotton Products Analysts (SCPA) entered its second decade facing major challenges.

The relatively small society, formed in 1909 by cottonseed analysts in the southern United States, was attracting members with diverse interests and problems.

The society had grown from nine founders to nearly 200 members by 1919. Many new members dealt with fats and a new journal

oils from sources other than cottonseed. It also was in 1919 that Frank Smalley first presented a trophy for the best analysis of cottonseed by a participant in the society's check sample program. The trophy went to G.C. Hulbert of Southern Cotton Oil. Since then approximately 50 persons have received the award, which has been presented annually.

In 1920, outgoing President Rex Perry asked members to change the society's name. Perry said a new name could "more correctly describe the aim and scope of our endeavors." It was described as a way to say "welcome" to potential members working with fats and oils of every description.

On Tuesday, May 11, 1920, by a threefourths majority, members approved a new name: the American Oil Chemists' Society.

"I believe that we have laid the foundation of an association that will endure and is destined to become a powerful influence in the vegetable oil industry," Perry said. He was a U.S. citizen working for Gunns Ltd. in West Toronto, Canada. Gunns Ltd. was a predecessor of Canada Packers, which eventually became part of Maple Leaf Foods.

SCPA founding member G. Worthen Agee, citing increasing time demands of his analytical laboratory in Memphis, resigned as editor of the Chemists' Section of *Cotton Oil Press* during that 1920 meet371



## AOCS' 100 years

In 1948, AOCS Executive Secretary Lucy Hawkins asked longtime AOCS members to try to identify the persons in a 1923 photo taken during the AOCS Annual Meeting in Little Rock, Arkansas. In the front row, left to right, are: 1. E.R. Barrow, 2. P.S. Tilson, 3. Thomas C. Law, 4. R.C. Hatter, 5. Unidentified, 6. P.P. Hindelang, 7. R.H. Fash, 8. G.C. Hulbert, 9. L.M. Tolman, 10. H.B. Battle, 11. Unidentified, 12. T.L. Rettger, 13. Unidentified, 14. H.E. Brownfield, 15. E.C. Ainslie, 16. J.J. Vollertsen, 17. T.B. Caldwell, 18. Probably R.S. McKinney, 19. George S. Jamieson. Back row (left to right): 1. David Wesson, 2. N.C. Hammer, 3. Felix Paquin, 4. Herbert S. Bailey, 5. F.B. Porter, 6. Archibald Campbell, 7. Unidentified, 8. Edward Bennett, 9. Unidentified, 10. C.B. Cluff, 11. C.V. Serbell, 12. Herman Aspegren, 13. Unidentified, 14. William Kelley, 15. W.D. Hutchins, 16. Unidentified, 17. Procter Thomson, 18. John Malowan, 19. Unidentified, 20. Unidentified, 21. G. Worthen Agee, 22. E.M. James, 23. Unidentified, 24. John M. Burmaster, 25. H.J. Morrison, 26. J.B. Pratt, 27. A.W. Putland, 28. James J. Ganucheau.

■ L.M. Tolman dies (1922 AOCS President), *JAOCS 26*(6):39 (1949)

■ Herbert B. Battle (obituary), *Oil and Fats Industries* 6(8):10 (1929)

■ Harley James Morrison, *Oil & Soap 12*(10):229 (1935)

H.J. Morrison Dies, JAOCS 25(12):18 (1948)

■ J.J. Vollertsen Dies, AOCS President in 1923, *JAOCS* 43:90A (1966)

R.H. Fash dies, JAOCS 27(10):19 (1950)

■ Harry Phillip Trevithick (obituary), *Oil & Soap 22*(2):12 (1945)

■ A.W. Putland Dead, *JAOCS 25*(12):34 (1949)

# For further reading:

■ Presentation of a Gavel at the 15th Annual Banquet of the AOCS, New Orleans, May 6, 1924, H.B. Battle, *Journal of Oil and Fat Industries 2*:144 (1924).

■ The story of the ceremonial gavel, *inform 17*:400 (2006)

■ The Annual Banquet, *Journal of Oil and Fat Industries* 3:215 (1926)

■ AOCS History: Specialized, local sections widen opportunities, *JAOCS 61*:1007–1011 (1984)

■ Chemistry in the Development of the Cottonseed Industry, C.B. Cluff, *Oil & Soap 14*(9):234–237 (1937)

■ The Journal's First Editor Reviews the Past ... When He Predicted the Future, H.S. Bailey, *JAOCS 38*(11):4, 7 (1961)

■ History of the Fat Analysis Committee, *JAOCS 30*(9):4 (1953)

■ AOCS History: From Soaps to Detergents, *JAOCS* 61:602–606 (1984)

■ A Brief History of Production Methods Used in the Margarine Industry, L.F. Conway, *JAOCS 31*(6):30–31 (1954)

Margarine: 100 Years of Technological and Legal Prog-

- ress, S. Miksta, JAOCS 48:169A-172A (1971)
  - Obituaries (Rex Perry), *JAOCS 36*(8):27 (1959)
  - Obituaries (F.B. Porter), *JAOCS 32*(1):28 (1955)
  - Clarence B. Cluff (obituary), Oil & Soap 22(2):12 (1955)

## Meet your Past President . . .

- R.W. Perry, *Oil & Soap 23*(12):18 (1946)
- F.B. Porter, *Oil & Soap 23*(12):18 (1946)
- C.B. Cluff, Oil & Soap 24(1):18 (1947)
- L.M. Tolman, Oil & Soap 24(1):18–19 (1947)
- H.B. Battle, *Oil & Soap 24*(2):14 (1947)
- H.J. Morrison, *Oil & Soap 24*(2):14–15 (1947)
- J.J. Vollertsen, *Oil & Soap 24*(3):18 (1947)
- R.H. Fash, Oil & Soap 24(3):18 (1947)
- H.P. Trevithick, Oil & Soap 24(4): 20–21 (1947)
- A.W. Putland, *Oil & Soap 24*(4): 21–22 (1947)

Articles from *inform* volumes 13–20 (2002–2008) may be viewed at no charge by AOCS members through their member pages at the AOCS website. Articles from *JAOCS* and its predecessor publications are available at no charge to current *JAOCS* subscribers via their AOCS member page. There is a fee for non-*JAOCS* subscribers to view such articles online.

## Timeline: 1919–1928

#### 1919

AOCS President R.W. Perry, a U.S. citizen, works for a Canadian firm in Canada during his term as president.

British patents on continuous solvent extraction issued.

First Smalley Award presented to G.C. Hulbert.

Leatherhead Food Research Association founded.

Francis William Aston invents the mass spectrograph.

German patent issued to Hermann Bollmann for continuous solvent extraction of fats.

#### 1920

Society of Cotton Products Analysts changes its name to the American Oil Chemists' Society.

AOCS creates "referee chemist" membership category; first such designation by a U.S. professional society.

Herbert S. Bailey succeeds G. Worthen Agee as editor of Chemists' Section in *Cotton Oil Press.* 

George Jamieson, head chemist for oil, fat, and wax at USDA Bureau of Chemistry, named AOCS' third honorary member.

American Soybean Association founded.

Jane E. Mayo of Law & Co. is listed as a member in the July 1920 Chemists' Section of *Cotton Oil Press.* 

Refractometer suggested as aid to rapid analysis of fat-bearing materials.

#### 1921

Frank Smalley dies of peritonitis on August 15 after operation in Boston; Herbert S. Bailey takes over Smalley's check sample program.

AOCS board votes to incorporate as Louisiana corporation.

David Wesson's crossed flask symbol shown at 1921 AOCS meeting; design has two crossed Kjeldahl flasks below a small Soxhlet flask.

C.L. Alsberg, chief of USDA Bureau of Chemistry, and W.W. Stockberger, head of USDA Office of Drug, Poisonous and Oil Plant Investigations, named honorary members.

Riceland Foods founded in Little Rock, Arkansas.

#### 1922

AOCS Annual Meeting in New Orleans postponed until June 5–6 because of Mississippi Valley floods.

AOCS' cooperative check sample program named for the late Frank Smalley.

AOCS reports members in 32 states, Canada, and the Philippines.

A.E. Staley Manufacturing Co. in Decatur, Illinois, begins large-scale soybean processing.

#### 1923

AOCS adds two vice-presidents to governing committee to expand membership representation on the board.

First U.S. processing of soybeans by batch solvent extraction at the Piatt County Cooperative Soy Bean Company in Illinois.

Midland Linseed Products Co. bought by Archer Daniels; firm's name becomes Archer Daniels Midland Co.

Nucoa Butter Co. changes name to Best Foods Inc.

W.E. Normann reports discovery of interesterification.

#### 1924

Outgoing AOCS President H.B. Battle presents walnut/hammerstone gavel to new president.

First quarterly issue of *Journal of Oil* and Fat Industries published in July as AOCS journal begins publishing separately from *Cotton Oil Press*; a quarterly during 1924 and 1925.

Eastern Cotton Oil Co. in Norfolk, Virginia, begins continuous solvent extraction of soybeans with Bollmann extractor.

For the rest of this timeline, a full list of Smalley Award Recipients, and further historical sketches from this yearlong series, login and visit www.aocs.org/press/inform/. ing. Herbert S. Bailey, a chemist at Southern Cotton Oil Co., became editor. He had become an honorary member of the society five years earlier when he was working for the U.S. Department of Agriculture's Bureau of Chemistry.

AOCS was the first U.S. organization to certify referee chemists. In 1920, the society created a new membership category active referee member—to provide buyers and sellers with a list of highly proficient analysts. Applicants had to do well in the check sample program as well as pass an examination before a new AOCS Referee Examination Board, the predecessor to today's Examination Board. The Interstate Cottonseed Crushers Association (ICCA) began to require that arbitration chemists be certified by AOCS in addition to being members of the crushers' association.

At the 1921 meeting, President F.B. Porter used an alarm clock to control longwinded speakers, according to an unattributed series of "recollections" gathered by W.H. Goss published in the 1945 membership directory.

AOCS members Frank Smalley and Thomas Caldwell had been cited in a Chicago newspaper as the only two persons attending a professional baseball game who were wearing straw hats, meeting chairman L.M. Tolman reported at the 1921 meeting. The 1921 event was Smalley's last AOCS meeting. He died August 15, 1921, of peritonitis after an operation in Boston.

Heavy spring flooding that impeded travel in and out of New Orleans delayed the 1922 meeting by a month. The meeting, originally scheduled for May 8 and 9, was held June 5 and 6 at the Grunewald Hotel. The Grunewald building was to be a frequent site of AOCS meetings.

The society voted in 1922 to name its cooperative check sample program the Smalley Foundation Program in memory of Frank Smalley. The program bore Smalley's name for 56 years before being renamed the AOCS Laboratory Proficiency Program in 1998.

AOCS voted during that 1922 meeting to incorporate as a not-for-profit organization in Louisiana in order to reduce individual members' potential liabilities for any judgments against the society. Louisiana would remain the society's corporate home until 2007 when AOCS became an Illinois not-for-profit corporation.

Members broke precedent in 1922 by electing L.M. Tolman of Wilson and Co. as president to succeed Procter & Gamble's C.B. Cluff. Previously the presidency had alternated between chemists from independent laboratories and those from manufacturing firms. Cluff was a key figure in the society's early efforts to improve laboratory refining methods.

Eighty-five years ago AOCS leaders were concerned, as they are now, with finding ways to broaden members' representation during governing board discussions. They decided to add two vice-presidents to the list of officers. The two new vicepresidential positions were not considered as stepping stones along the officer hierarchy, but simply as a way to involve "lay" members in board discussions. Previously, anyone elected as the society vice-president actually was being selected as "president-elect" for the following year.

#### A NEW JOURNAL

"The time is coming when, if the Oil Chemists are to be anything more than the Cotton Products Analysts, we must have a journal of our own," H.S. Bailey wrote in a 1922 editorial in the Chemists' Section of the *Cotton Oil Press.* "The time has not yet arrived but is in the dawning and we should be turning our eyes toward the coming of that day when in reality we will be the American Oil Chemists' Society."

"That day" came two years later in 1924 when AOCS began publishing the quarterly *Journal of Oil and Fat Industries (JOFI)*, breaking another tie to the Interstate Cottonseed Crushers Association. *JOFI* wasn't the first name proposed for the new publication. H.J. Morrison told the 1923 meeting that "while I wouldn't want to name it any other way than the *Journal of the American Oil Chemists' Society*," he thought a different title might attract papers from authors outside the society. *JOFI* eventually was selected.

The final edition of the Chemists' Section in the crushers' publication *Cotton Oil Press* appeared in May 1924. The new journal's first issue appeared in July 1924 with 325 subscribers. AOCS spent \$925 to produce the July and October quarterly issues of *JOFI* that year, but journal income was only \$579. In January 1926 *JOFI* became a monthly. The society has been publishing its journal for 84 years.

Retiring AOCS President Herbert B. Battle began an AOCS tradition in 1924. An independent laboratory owner and avid amateur historian in Montgomery, Alabama, Battle presented AOCS with a home-made

gavel commemorating North America's first vegetable oil extractors, whom he identified as native Americans who had pounded walnuts, hickory nuts, and even acorns with hammer stones to obtain oil for decorative and food purposes. The gavel's handle is from an Alabama walnut tree, and the hammerstone, also from Alabama, is similar to those used by native Americans. The gavel is transferred at each AOCS annual meeting from the outgoing president to the new president. In the late 1970s, A.R. Baldwin began creating miniature replicas of that gavel for each president to keep after leaving office.

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AOCS formed when the cottonseed crushers had asked some chemists to determine the best analytical methods for use by manufacturing and independent chemists. Those methods had been adopted by the crushers' Chemists' Committee as the association's official methods. But in 1925, C.B. Cluff, AOCS' 1921 president, was appointed to head an AOCS committee to prepare a loose-leaf compilation of methods. Within three years, the new methods book was completed. A new committee was appointed to review methods regularly to recommend additions and revisions, a task later assumed by AOCS Uniform Methods Committee.

In 1925, J.C.P. Helm, an independent analytical laboratory owner in New Orleans, was named AOCS secretary/treasurer. For the next two decades, Helm would maintain the society's membership rolls and financial files, be the official AOCS representative to the state of Louisiana, and handle routine society business and correspondence. Helm's retirement in 1944 would trigger AOCS' founding a permanent business office in Chicago.

David Wesson surprised the 75 participants at the 1926 annual banquet at the Chess, Checker and Whist Club at 120 Bourbon St. in New Orleans. When the meal was over, Wesson announced the "croquettes à la Creole" on the menu were made from cottonseed. Wesson recently had been ridiculed in some newspapers for his suggestion that cottonseed contained protein suitable for human consumption and should not be regarded solely as potential fertilizer or animal feed.

## AOCS' 100 years

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AOCS Presidents (for biographical sketches published in *Oil & Soap* see "For further reading," page 371)

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1919	R.W. Perry	1924	H.L. Morrison
1920	F.B. Porter	1925	J.J. Vollertsen
1921	C.B. Cluff	1926	R.F. Fash
1922	L.M. Tolman	1927	H.V. Trevithick
1923	H.B. Battle	1928	A.W. Putland

Fifty-two years later in 1978, approximately 900 persons would attend an AOCS world conference in Amsterdam on food use of proteins from oilseeds and other vegetable sources. Two of the three luncheon entrees in the convention hall cafeteria during the meeting were made from vegetable protein.

#### AOCS Annual Meetings

1919	New Orleans	1926 New Orleans	5
1920	New Orleans	1927 Memphis	
1921	Chicago	1928 New Orleans	5
1922	New Orleans		
1923	Hot Springs,	AOCS fall meeting	S
1923	Hot Springs, Arkansas	AOCS fall meeting 1927 New York	S
1923 1924			S
	Arkansas	1927 New York	S

In 1926, gavel donor H.B. Battle became the first analyst to win the Smalley Cup for best cottonseed meal analysis for a third time, which meant he could keep the trophy cup permanently. Battle immediately offered to pay for a new Smalley trophy cup.

In August 1926, the *Journal of Oil and Fat Industries* announced it would offer three prizes named in honor of the father of fats and oils chemistry, Michel Eugène Chevreul, for the top three original articles to be published in the journal during 1926–1927. Chevreul was the first to publish that fat consists of a combination of fatty acids and glycerin. A typographical error in the first announcement said the award would be known as the "Cheoreul" prize. A correction appeared the next month. The deadline for submission of eligible articles was later extended to April 1928, but there is no record of which papers, if any, were ever selected to receive the award. The modern Chevreul Award has been pre-

### Jane Mayo: AOCS' first woman member

The 1920 AOCS member directory includes Jane Mayo of Law and Co. in Atlanta, Georgia. She probably was the first female member of AOCS. Mayo later worked for Buckeye Cotton Oil Co. in Atlanta. The name of another woman, who is listed in the society's journal as applying for membership prior to Mayo, does not appear in any membership directories; she apparently did not complete the membership application process, or did not receive the required unanimous favorable vote from the membership committee. No pre-1917 records exist to indicate whether the society had any women members during its first eight years. sented annually by the French Association Française pour l'Etude des Corps Gras (AFECG) since 1963.

In 1927, the AOCS journal's name was shortened to *Oil and Fat Industries*, with Allen Porter Lee succeeding Bailey as editor. In his final editorial for the *Journal of Oil and Fat Industries*, Bailey thanked those who had aided in the journal's growth during his tenure, closing with: "The opportunity is still yours to make the *Journal of Oil and Fat Industries* a publication which will rank with other journals of American scientific societies throughout the world."

AOCS' first national fall meeting was held during September 1927 in New York City's Chemists' Club. Seven technical papers were presented during what AOCS leaders declared to be a very successful event. The idea of a fall meeting drew opposition from some members who dealt primarily with cottonseed oil. W.D. Hutchins, a vice president at the time, said: "I fear the attendance will be very small since it comes in the very busiest part of our season, and that the prestige of our society among our Eastern friends will be hurt rather than helped by it." H.B. Battle also objected.

But J.J. Vollertsen, a member since 1916 who served as AOCS treasurer during 1948–1953, wrote in 1953 that the 1927 fall meeting marked the beginning of significant society participation by persons involved in the oils and fats industry outside the cotton-seed industry. Cross-country transportation made it difficult in the mid-1920s for northern and eastern members to attend the annual meeting, usually held in the Deep South. Fall meetings continued through 1976.

In 1928 AOCS broke another tie with the ICCA by dropping a requirement that its referee chemists be ICCA members. This also was the year when AOCS' first loose-leaf book of methods was published. Joint research programs with the cottonseed crusher association were approved.

AOCS formed a soap section during its 1928 meeting. For approximately three years, AOCS' detergency committee had been active, including representatives of related organizations, to determine the detergent value of soap and soap products. The soap section was to foster improved analytical methods for soap, glycerin, and related materials, including providing check samples for interested laboratories. During the next decade, soap's importance in AOCS' universe would be emphasized by a change in the title of the society's journal to *Oil & Soap*.

By the end of its second decade, the society had a new name, a new monthly journal, and had begun holding two national meetings each year. The leadership was looking forward to the third decade, which they did not know would include the Great Depression.

George Willhite, who is preparing this series of articles as AOCS' centennial historian, retired from AOCS in 2002 after 27 years as a member of its publications staff. He is an honorary member of AOCS. He can be contacted via e-mail at: willhite@aocs.org.

# Next month: 1929–1938: Survival