

Dedication

Prehistoric to 1600 A.D.

Pre-historic: Cottonseed oil is obtained by primitive cooking and grinding methods in India and China.

- 259 B.C. Sesame, linseed and castor oil are pressed in Egypt.
- 184 B.C. Screw and wedge presses, filters and edge runner mills are in use in Rome to facilitate oil extraction.
- 23-79 A.D. Pliny the Elder describes the accidental production of sodium silicate by sailors who took lumps of natural soda from their cargo to support cooking vessels over their fire on a sandy beach. Pliny also describes olive, rice, almond, sesame, grape, walnut and palm oils and numerous animal fats.
- 79 A.D. Pompeii is destroyed. (Recent excavations have revealed two buildings equipped as soap factories.)
- 100-200 First soap is produced from wood ashes and fat.
- 800-850 Production of soap starts in Germany.

Buildings & Grounds

A Buildings and Grounds Committee has been established to conduct periodic thorough inspections of the new AOCS headquarters building and grounds in Champaign, Illinois, and to make recommendations relating to maintenance and safety to the Governing Board.

Mike Pulliam of A.E. Staley Manufacturing Co., Decatur, Illinois, is chairman of the new committee. Other committee members are Dave Skinner, manager of production at Kraft's Humko facility in Champaign, and Norman Field, plant manager for Anderson Clayton Foods/Humko facility at Jacksonville, Illinois.

"We have appointed people who know buildings and who also are close geographically to the Champaign headquarters so it won't be a hardship for them to make inspections," AOCS President Robert Hastert said.

The committee is to spend at least four hours inspecting the building at least once a year, and perhaps every six months, Hastert said.

Until the official dedication in November, the Building Committee had responsibility for the headquarters building. After the November dedication, the Buildings and Grounds Committee assumes this responsibility.

"We want our members to know not only that we are spending close to \$1 million for our headquarters but also that we're appointing experts to help protect our investment," Hastert said.

Building Committee members have been E.G. Perkins as chairman, Timothy Mounts, David Tandy, Norman Witte, Harold Sandvig and AOCS Executive Director James Lyon.

"I think they deserve a lot of credit for the work they have done," Hastert said.

- 800-900 This period marks the beginning of the great soap industry of Marseille, France.
- 1300-1400 The soap industry of England is begun.
- 1399 The Brothers Van Eyck use linseed oil as a vehicle for paint.

1600 to 1700

- ca 1600 Soap production increases in Marseille and Toulon.
- 1600-1700 Oil extraction starts in Holland.
- 1607 First cotton crop in North America is grown in the Colony of Virginia.
- 1608 Manufacture of potash, tar and glass is attempted in Virginia.
- 1623 Salt manufacture is begun by the Plymouth Colony in New England.
- 1631 A mill is erected at Portsmouth, New Hampshire, to saw lumber and make potash from the refuse.
- 1633 Eight and one-half pounds of soap are equal to three-fourths of a pound of beaver skin.
- 1637 Mr. Browne, a "sopemaker," requests and is granted admittance to Salem in September.
- 1640 Van Helmont experiments with a solution of sodium silicate. Potassium silicate had previously been described by Georg Agricola (1494-1555).
- 1648 John Winthrop Jr. is commissioned to manufacture salt by the General Court of Massachusetts. Glauber names sodium silicate "oleum silicium."
- 1652 Pascal enunciates his law, "The pressure applied at any point to a liquid in a closed vessel is transmitted undiminished to every portion of the vessel." Pascal's research paves the way for the invention of the hydraulic press in 1795.
- 1658 Browne's "Hydriotaphia" mentions "coagulated large lumps of fat" of "the consistence of the hardest castile soap" found in a body buried 10 years. This probably is the earliest reference to the material Fourcroy later studied and named "adipocere" in 1786.
- 1661 Boyle observes that fuming nitric acid thickens olive and almond oils.
- 1662 Manufacture of quicklime from limestone begins at Providence, Rhode Island.
- 1665 Cottonseed oil is used in the British West Indies as a medicament for old ulcers.
- 1670 Richard Wharton of Boston, Massachusetts, develops a process for making salt by solar evaporation.
- 1690 Whale fishing and the whale oil industry begin on a large scale in New England.
- 1696 Otto Tachenius theorizes on the presence of a "hidden" acid in fats and oils.

1700 to 1800

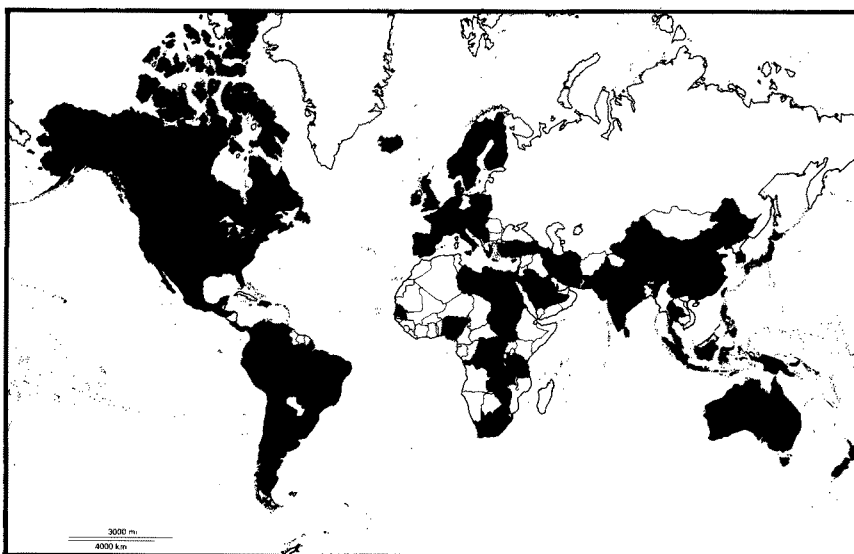
- 1700 Liger calls attention to the high food value of oil press cake.

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1700 to 1800 (cont'd)

- 1707 South Carolina passes a law to encourage the manufacture of potash and saltpeter.
- 1708 Turpentine is produced in Connecticut and then shipped to Boston in casks containing 112 pounds.
- 1716 Benjamin Franklin helps his father manufacture soap and candles in Boston.
- 1731 Rhode Island gives John Lucena (naturalized the same year) sole right to manufacture soap in that colony. Lucena had learned the soap business in the factory of the King of Portugal.
- 1736 Duhamel distinguishes between soda and potash.
- 1755 Joseph Black of Edinburgh recognizes magnesia alba to be distinct from lime.
- 1757 Benjamin Franklin investigates the calming effect of oil on rough water.
- 1759 Marggraf independently recognizes the distinction between magnesia and lime.
- 1768 Two hundred and twenty tons of whale oil are exported from Boston to the West Indies and 4,000 tons to England. The candle industry in New England has developed to such an extent that 500,000 pounds of candles (spermaceti and tallow) are shipped annually to the West Indies in addition to large quantities to England.
- 1769 Dr. Otto of Bethlehem, Pennsylvania, expresses the first cottonseed oil and presents it to the American Philosophical Society for examination.
- 1770 North Carolina exports 88,000 barrels of tar, 21,000 barrels of pitch and 88,000 barrels of turpentine.
- 1775 Amiel Weeks of Harwich, Massachusetts, produces the first salt on an industrial scale in the U.S. by solar evaporation. Conradi discovers cholesterol.
- 1777 Achard investigates the effect of sulfuric acid on various fats.
- 1779 Scheele discovers glycerine by mixing olive oil with litharge and heating.
- 1782 Guyton de Morveau obtains washing soda from Glauber's salt.





Shaded areas on map indicate the 80 nations where AOCS members live and work

- 1783 The Royal Society of Arts in London offers a gold medal to any planter in the West Indies expressing a ton of oil from cottonseed. The offer is renewed for six years but is not claimed. Guyton de Morveau produces water soluble sodium silicate by fusing quartz and sodium carbonate together.
- 1785 The South Carolina Agricultural Society offers medals for the best yields of oil from cottonseed, peanuts, sunflower, sesame and other seeds.
- 1786 Eau-de-Javelle is produced in Paris.
- 1788 Le Blanc soda process is invented; it first is used in England by Muspratt in 1824. Gren discovers cholesterol in gallstones.
- 1789 Transparent "Pear's Soap" is manufactured by Andrew Pears in London.
- 1790 Gowen refines rapeseed oil with sulfuric acid.
- 1793 John Harrison of Philadelphia, Pennsylvania, begins the first manufacture of sulfuric acid in the U.S.
- 1795 J. Bramah in England constructs the first hydraulic press. A.N. Scherer offers the first explanation of the cause of fat rancidity.
- 1797 Ammonia soaps are mentioned by Darcet in the "Rapport" to the French Government.
- 1799 Commercial process for bleaching powder is designed by Thénard and put into use by Tennant & Co. in England.
- 1800 to 1900**
- 1801 The first U.S. cottonseed oil mill is established but the venture fails. The oil produced is used in paints and for illumination.
- 1806 Colgate starts soap production in a factory, New York City.
- 1807 Davy isolates sodium and potassium. Thomas W. Dyott, an apothecary of Philadelphia, starts domestic production of perfumes.
- 1808 As a result of Jefferson's embargo on foreign commerce, the price of potash in England and Canada rises from \$100 to \$300 per ton. As a result, much potash is smuggled into Canada.
- 1810 Chevreul commences work on the saponification of fats.
- 1811 Figuier calls attention to the bleaching effect of bone black.
- 1812 Peppermint oil is produced in Connecticut.
- 1813 The War of 1812 results in scarcity of salt and leads to the first salt production on the Conemaugh and Kiskiminetas rivers in western Pennsylvania.
- 1814 Chevreul isolates butyric acid from butter.
- 1815 John Taylor manufactures illuminating gas by the destructive distillation of fatty oils.
- 1816 Chevreul establishes the constitution of fats as glycerides. Distillation of peppermint oil begins in Wayne County, New York.
- 1817 Chevreul (with Braconnot) prepares stearic acid.
- 1818 Johann Nepomuk von Fuchs describes numerous industrial uses for sodium silicate. Holland has 430 oil mills.
- 1818-23 Chevreul obtains valeric, caproic and impure oleic acids.
- 1819 Petroleum is found in boring salt wells on the Muskingum River, Ohio. The preparation of cottonseed for cattle food is patented. Poutet proposes the use of a mixture of nitric acid and mercury to classify fats.
- ca 1820 Nutmeg oil is used in the popular Bandanna or Banda soap.

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- 1823 Chevreul publishes his "Recherches chimiques sur les corps gras d'origine animale."
- 1825 Chevreul and Gay-Lussac receive a French patent for the separation of fatty acids and their use in candle fabrication. Gay-Lussac obtains a patent covering the distillation of fatty acids.
- 1828 Dumont discovers a method to reactivate bone black. P.B. Smith of New York establishes the first varnish factory in the U.S. Gusserow discovers a method for separating the solid from the liquid fatty acids.
- 1829 Lefèvre observes that tallow under the influence of sulfuric acid yields fatty acids. Tallow is supplemented by the use of coconut oil. Williams, an ex-governor of South Carolina who is known as the "father" of the cottonseed oil industry, operates an oil mill at Robbins Neck, S.C., and feeds the press cake to cattle. Cottonseed oil is quoted at 80 cents per gallon in Providence, R.I.

Supelco AOCS Research Award

The most prestigious award given by the American Oil Chemists' Society is the Supelco AOCS Research Award. The award was first established as the Award in Lipid Chemistry in April 1964. It was renamed in 1982 when sponsorship was assumed by Supelco Inc. of Bellefonte, Pennsylvania. The award is presented to an outstanding scientist in the field of lipid chemistry and recognizes outstanding original research, the results of which have been published in high quality technical papers.

Winners of the award have been:

1964, Erich Baer	1977, George Popjak
1965, Ernest Klenk	1978, Ralph Holman
1966, H.E. Carter	1979, Stephen S. Chang
1967, Sune Bergstrom	1980, James F. Mead
1968, Daniel Swern	1981, Laurens van Deenen
1969, H.J. Dutton	1982, R.M.C. Dawson
1970, E.P. Kennedy	1983, David von Dorp
1971, E.S. Lutton	1984, Morris Kates
1972, A.T. James	1985, Bengt Samuelsson
1973, F.D. Gunstone	1986, R.R. Allen
1974, P.K. Stumpf	1987, Andrew A. Benson
1975, W.O. Lundberg	

- ca 1830 Jessie Oakley of Newburgh, New York, places soap on the market in cake form, one pound in weight, and wrapped.
- 1830 The first successful hydraulic press is built, the manufacture of which is credited to a French engineer, Chambauvet.
- 1832 Russel invents the hydraulic filter press. Boudet discovers elaidic acid while investigating the effect of Poutet's reagent on oleic acid.
- 1833 Milly and Motard saponify fats under pressure with lime.
- 1834 Cottonseed oil mills are established at Natchez, Mississippi; Mobile, Alabama; Florence, Georgia; and Petersburg, Virginia. These and other oil mill ventures of the period are not financially successful. The oil produced is used for illumination, soap, painting and lubrication. Runge prepares the first "sulfonated" oil by the action of sulfuric acid on olive oil.
- 1835 Manufacture of peppermint oil begins in St. Joseph Co., Michigan.
- 1836 B.T. Babbitt starts soap production in New York City. Hempel and Blundel suggest palm oil as a raw material for candle fabrication.
- 1837 William Procter and James Gamble establish the firm of Procter & Gamble in Cincinnati, Ohio.
- 1840 Milled toilet soaps are made for the first time in the U.S. by David S. Brown & Co.
- 1841 Varrentrapp observes that oleic acid fused with caustic alkali gives palmitic and acetic acids.
- 1842 Schmersahl patents a method for the refining of cottonseed oil with caustic alkali.
- 1843 William G. Armstrong invents the hydraulic accumulator. The application of solvent extraction for the production of vegetable oil is said to have originated with Jesse Fisher in Birmingham, England.
- 1844 Jules Haul, a Frenchman, starts production of perfumed toilet soaps on Chestnut Street in Philadelphia.
- 1845 Petroleum is discovered at Tarentum, Pennsylvania, and an unsuccessful effort is made to refine it.
- 1846 Sobrero discovers nitroglycerine.
- 1847 Charles Lennig begins the first manufacture of bleaching powder at Bridesburg, Pennsylvania. Colgate and Company move to Jersey City.
- 1848 Kolbe studies electrolysis of fatty acid salts. Masse and Tribouillet obtain the first patent for the distillation of fatty acids under vacuum.
- 1849 Claude Bernard discovers that the pancreatic ferment is capable of hydro-