A.E. MacGee





When the oils and fats solvent extraction industry began to expand in the United States a few decades ago, A.E. "Doc" MacGee was among the folks who helped make it happen.

In the years just before the Depression, MacGee convinced Skelly Oil to set up a solvents division—they did and hired the young man as its director. MacGee then tried to convince two firms building large volume continuous extractors imported from Germany that they should use Skelly's hexane solvent rather than the solvent recommended by the manufacturers. ADM's Ed Schmidt and Sam Sorenson took MacGee's advice. The rest is history.

"The Germans were hesitant to guarantee the extractor would function if ADM didn't use the solvent they specified," MacGee recalls, "but we were better than they were right down the line-boiling point, purity, and freedom of both oils and meals from foreign odors and tastes. They (ADM) agreed to go with Skelly. That was the start, but it wasn't too long before we were shipping solvent all over, even to some foreign countries-but that was the first big success."

MacGee became known to fats and oils people across the nation. And his willingness to help others solve problems won him a host of friends, among them AOCS members who elected him to be AOCS president in 1962.

MacGee was born October 17, 1899, in Toledo, Texas, along the Sabine River which forms the border between Texas and Louisiana. His father worked in the Louisiana and Texas oilfields.

MacGee retains his characteristic clear enunciation and rapidly flowing words as the recalls becoming enthralled with the world of chemistry during introductory courses at Southwestern Louisiana Institute (now the University of Southwestern Louisiana) in LaFayette, LA.

In the spring of 1918, when he was 18 years old, MacGee voluntarily joined the U.S. Army and wound up as a replacement in the First Division in France where he "went through all the battles over there along with eleven months with the army of occupation in Germany."

"When I came back after all that turmoil over there I couldn't go back to school," MacGee says, so he took a job with Wescott Engineering Company doing highway construction work in Texas.

In 1920, he returned to college at Louisiana State University where he received his B.S. in chemistry in 1921 and his masters the following year. He chose Ohio State University to work on his doctorate because (a) it was among the universities that offered a scholarship, and (b) an LSU prof who was a graduate of Ohio State University urged him to attend the Columbus, Ohio, institution. To help finance his Ph.D. he taught one year at Case Institute of Technology (now Case Western Reserve University) in Cleveland, then returned to Ohio State on a fellowship where, in 1925, he became the third person in the Western Hemisphere to get a doctorate in ceramics. The fellowship required that the recipient major in ceramics, thus explaining why MacGee majored in ceramics rather than chemical engineering. In 1925 he also began to play golf, later to become his favorite hobby.

"I stayed in Columbus for a couple of years to work with the National Bureau of Standard lab in ceramics," MacGee recalls, "but about 1929 I began to get a yen for petroleum again."

He accepted a post as chief chemist and superintendent with Viking Gasoline Corp. in Charleston, WV, where he met Jane Boggs. They were married June 3, 1930, in Charleston.

The economic shock waves preceding the Depression caused MacGee to ponder his future. Viking was a relatively small regional firm operating four natural gasoline plants, separating some propane to produce liquified petroleum gas. Skelly was one of the top producers of natural gas and gasoline in the United States at that time and looked better for the future to MacGee. He talked to Skelly officials and convinced them they should look into producing solvents and chemicals. They agreed and hired MacGee as manager of the new solvents department.

MacGee convinced ADM, Glidden, and Central Soya to use Skelly's hexane in their imported continuous extractors. By the time MacGee retired 34 years later as manager of Skelly's Industrial Division, the firm would be selling several million gallons of solvents each month. And at MacGee's urging, the firm would become involved in production of ammonia and other chemicals for fertilizers, plastics such as polyethylene, and also phenol, acetone and resins of various types.

"Doc," as he was to become known to hundreds, joined the AOCS in the summer of 1931. By 1932, he was chairman of the advertising committee for the Society's new journal. Its predecessor, *Oils and Fats Industries*, had been published by a private firm, but a dispute arose and the AOCS decided to publish its own journal, to be known as *Oil and Soap*.

One of the first questions raised was how to sell advertising space and MacGee recalls that during an informal gathering near the Chicago stockyards, it became apparent that he was the person with the most experience in sales.

"I told them, 'I'll sparkplug that for you and I'll run a full-page, 2-color ad each month,' "MacGee recalls. He was, in effect, the first chairman of the AOCS advertising committee, even though a formal committee would not be organized until later.

Helping launch *Oil and Soap* to success is one of three AOCS accomplishments in which MacGee says he takes the most pride.

In those early 30s, AOCS regulars sought ways to raise more money to help pay for national meetings during the Depression. MacGee suggested selling exhibit space and then characteristically took charge of directing the sales effort. The immediate goal was to sell 20 booth spaces at \$15 to raise \$300-an impressive sum in that era. The goal was met. And Doc still talks of the beginning of AOCS meeting exhibits as the second of his major contributions in which he takes pride.

During World War II, MacGee went on active duty with the U.S. Navy as officer-in-charge of the Chemistry Section of the Bureau of Ships in Washington, DC. The Section had cognizance of all nonmetallic materials that entered into the ship building and maintenance program, which were divided into three categories: paints and other protective coatings; rubber and other elastomers; and cellulosic materials, used for such items as life jackets, liferafts, plywood, and cordage.

After the war period, MacGee says, safety became a major interest in the fats and oils industry. One 1955 safety record report showed the oils and fats industry with the largest number of injuries per million man-hours worked among chemical industries. MacGee lobbied for creation of an AOCS safety committee and in 1956, AOCS President T.H. Hopper asked him to organize and be chairman of the Technical Safety and Engineering Committee.

One of the first tasks the committee undertook was to survey current safety practices, and to research the number, types, and causes of fires with an eye to determining ways to prevent them.

Helping launch that committee is the third of MacGee's favorite contributions to AOCS.

MacGee served on the Board of Governors as a memberat-large in 1958 and 1960, was elected vice-president in 1961, and served as president in 1962.

His support while president of the honored student program led to its initially being named the MacGee Award, but the title was later changed, he explained, because of his strong identification with Skelly solvents and the need for the program to develop support throughout the oils and fats industry. As president in 1962 he also presided over the first AOCS meeting held outside the United States-the fall meeting in Toronto.

MacGee also has been a member of the ACS, the American Institute of Chemists, International Oil Mill Superintendents Association, Tri-State Oil Mill Superintendents' Association and the National Paint, Varnish, and Lacquer Association, and the Navy League of the United States. MacGee has written some forty technical and semitechnical articles dealing with ceramics, oils and fats, paints, and rubber.

A common pattern to his AOCS activities throughout the years has been to willingly help find solutions to problems where he felt his talents could be useful, whether in helping a new journal sell advertising space, or helping find a new source of funds to help finance national meetings, or doing something to improve the industry's safety record, or launching a program to recognize outstanding students.

"Doc" has reduced his activities somewhat in recent years. Instead of playing golf seven or eight times a week, he now plays, on doctor's orders, only seven or eight times a year. As a retired Navy Captain, he reads with interest on military and naval strategy and on both national and international affairs.

He and his wife live in Kansas City with their daughter, Jane MacGee, who is an assistant professor of geo-sciences at the University of Missouri in Kansas City, MO. A son, Edwin, is a neurosurgeon in Kansas City with three sons of his own. Both MacGee children attended the University of Kansas.

Occasionally, AOCS members will hear someone say, "Doc MacGee used to. . .'

And you can fill in the blank with a host of things that Doc accomplished for his company, the fats and oils industry, and the AOCS.

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