



## CHEMICAL ENGINEER

MEET **LARRY CHARBONNEAU, PhD**, FHS CLASS OF 1957, CHEMIST AND CO-AUTHOR OF OVER 40 PATENTS.

**Larry Charbonneau, PhD**  
(1939-2017)

Larry Charbonneau appreciated many of his FHS teachers who nurtured and encouraged him. He specifically mentioned Larry Knutson, Everett Estness, Ted Estabrook, and Denis Kigin as influential in his high school years.

A scholarship to attend a two-week seminar at St. Olaf College between his junior and senior year of high school inspired Larry to change his career choice from mechanical engineering to chemistry.

Larry attended St. Thomas University and received his bachelor's degree from Mankato State University. Following graduation, he worked at 3M Corp. in St. Paul as a chemical engineer. There, he worked on automotive and industrial adhesives, then joined a group in Central Research that was developing new copying, printing, and photo processing techniques.

All of his colleagues at 3M had masters and doctorate degrees, and, with the encouragement of a supervisor, Larry left 3M to work toward advanced degrees. He completed his MS in chemistry in 1969 and his Ph.D. in organic chemistry in 1972, both at the University of Illinois. During his Ph.D. work, he needed to design a new instrument, so he resurrected the mechanical drawing skills Mr. Kigin taught him in high school and presented his advisor and machine shop with a detailed drawing.

Larry shared his expertise in chemistry by tutoring pre-med students at the University of Illinois and establishing a tutoring program for the General Motors Institute where students were tutored on a weekly basis.

Larry had a lengthy career working for General Motors Research Laboratories, the Celanese/Hoechst Chemical Company, and Dupont. During his career in polymer chemistry, he was involved in 75 different patents. Dupont purchased several of his patents, and he joined their staff, retiring in 1998.

Larry wrote and co-wrote over 40 patents, notably, Vectra, which can be found in most computers and cell phones today. Another of his patents was the process for preparing a polyester of hydroxy. This procedure allows one to obtain an aromatic polyester of high inherent viscosity and good melt stability. Larry stated, "The success of the American Chemical Society continues because we have acknowledged the roots in coating technology while sponsoring symposia in the cutting edge of areas of polymer and material science."

In retirement, the Charbonneaus returned to Faribault, and Larry formed his own company, Lakefront Consulting, to aid clients in the area of polymer chemistry and engineering.

An active member of the Knights of Columbus, he helped raise scholarship money for students wanting to attend Catholic colleges and universities. Larry served on numerous committees and was recognized for his 50 years of service to the American Chemical Society.