



Heartland Science



Ohio's Legacy of Discovery & Innovation

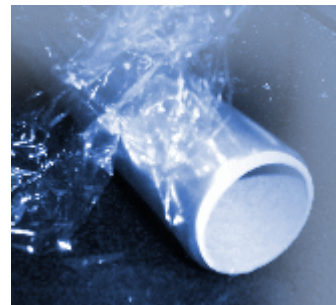


Materials

From Pottery to Plastics

Cellophane Packaging

William Hale Charch (1898-1958), who received a doctorate in chemistry from The Ohio State University in 1922, invented moisture-proof cellophane while working at DuPont. Cellophane revolutionized the food packaging industry, allowing use of the inexpensive transparent material on meat, fruits, vegetables, and other products.



Charch joined DuPont in 1925, and one of his first assignments was to develop a way to moisture proof cellophane. The goal was to improve cellophane so that it could be marketed for food packaging. He tested ideas some 2000 times but was eventually successful in his attempt. Food packaging has never been the same. Good pricing, strong marketing, and a general belief that cellophane was synonymous with cleanliness pushed cellophane sales. By 1938 cellophane sales accounted for 25% of DuPont's annual profit.

Charch continued his career at DuPont, serving in several capacities including Associate Director of the Rayon Chemical Division and Director of the Rayon Pioneering Research Section. In 1947 he established the Textile Fibers Department's Pioneering Research Lab. He focused much of his career directing the development of Teflon® , Orlon® , Dacron® , and Lycra® . Along the way he received a variety of awards for his work.

Cellophane History

Cellophane was originally invented in 1908 by Jacques Brandenberger, who was a Swiss textile engineer inspired by watching wine spilled onto a tablecloth in a restaurant. He thought that a plastic film might be layered onto fabric for a waterproof table covering. Though his attempts to layer the fabric failed, Brandenberger noted that the clear coating would peel off in a film. The rest is history. Cellophane was first produced commercially in Switzerland in 1912. In 1923, DuPont acquired the U.S. patent rights and began production in Buffalo, NY, in 1924.

Find out more...

- [DuPont Heritage: Cellophane](http://heritage.dupont.com/touchpoints/tp_1923-3/overview.shtml)
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