

Dr. Roy J. Plunkett

Discoverer of Fluoropolymers

Dr. Roy J. Plunkett, discover of polytetrafluoroethylene (PTFE) resin, died May 12, 1994 after a brief illness in his home in Corpus Christi, TX. He was 83.

THE DISCOVERER OF FLUOROPOLYMERS

Dr. Plunkett was a young research chemist at the DuPont Jackson Laboratory in Deepwater, N.J. when he made his famous discovery. On April 6, 1938, he was investigating the results of a failed experiment involving refrigeration gases when he discovered a white, waxy substance. The material, which DuPont trademarked Teflon®, proved inert to virtually all chemicals and was the most slippery material known. These properties have made PTFE one of the most valuable and versatile materials ever invented, contributing to significant developments in aerospace, communications, electronics, industrial processes, and architecture.



Dr. Roy Plunkett (right) reenacts discovery of PTFE in his laboratory. Plunkett shows his assistant, Jack Rebok (left), the white powder material he scraped from the inside the cylinder they curiously sawed open after a "failed" experiment with refrigeration gases. Bob McHaress looks on during this reenactment of the 1938 discovery.

Winner of Many Honors

Dr. Plunkett's contributions have been recognized by many scientific, academic, and civic organizations.

Academic

Dr. Plunkett received his B.A. degree in chemistry from Manchester College and his Master's degree and Ph.D. from Ohio State University. He was awarded a Doctor of Science degree by Manchester college, an Honorary Doctor of Science degree from Washington College, and the Centennial Award from Ohio State University.

Scientific & Civic

His contributions have also been recognized by numerous scientific, and civic communities. He held:

- ◆ The John Scott Medal from the City of Philadelphia for his discovery
- ◆ The Modern Pioneers in Creative Industry Award from the National Association of Manufacturers
- ◆ The Citation Award from the Society of Plastics Industry
- ◆ The Chemical Pioneering Award from the American Institute of Chemists
- ◆ In 1973, Dr. Plunkett was inducted into the Plastics Hall of Fame.
- ◆ He was inducted into the National Inventors' Hall of Fame in 1985, joining other famous scientists including Thomas Edison, Louis Pasteur, the Wright Brothers, and Eli Whitney.

- ◆ In October 1993, he was inducted into the Engineering and Science Hall of Fame in Dayton, Ohio.

Plunkett Award Programs

DuPont Fluoropolymers conducts two award programs named for Dr. Plunkett.

The **Plunkett Awards for Innovation with DuPont Teflon®** is a worldwide competition conducted among manufacturers and end-users, recognizing the most innovative commercial applications using DuPont fluoropolymer resins.

The **DuPont Plunkett Student Awards for Innovation with Teflon®**, aimed at U.S. university students, encourages new developments in fluoropolymers and grants prizes and scholarships worth over \$40,000.

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Remembered With Affection and Respect

A GOOD CAREER- A GOOD LIFE

On the occasion of the 50th Anniversary of "Teflon," Dr. Plunkett said " I had a good career, a good life. I got to associate with top people. So I can't say I want to do my life over, because I don't know that it would be better if I did."

REMEMBERED WITH AFFECTION

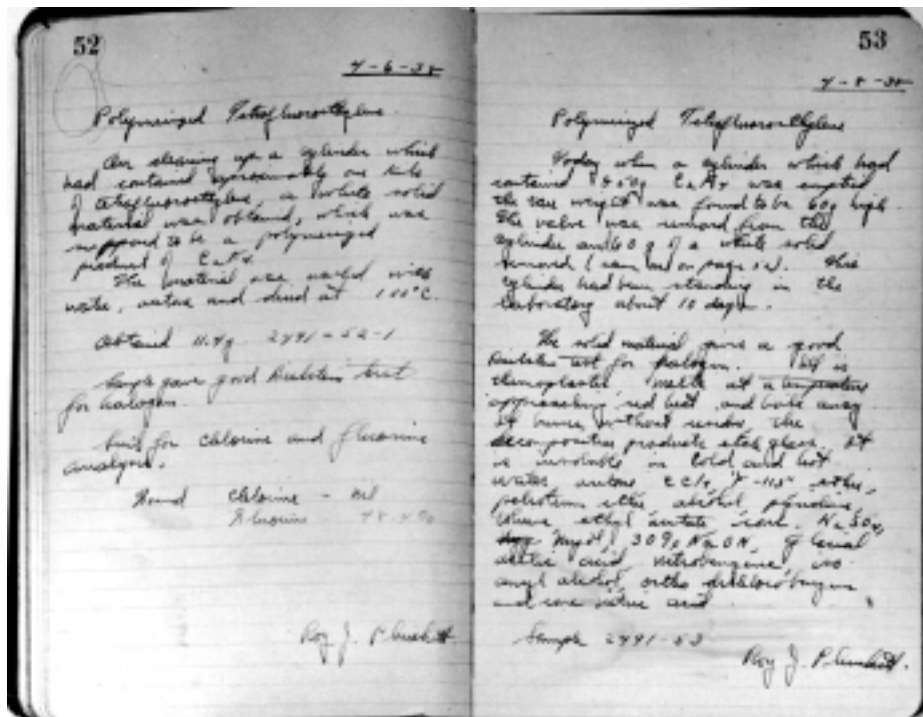
James M. Keegan, DuPont Fluoropolymers Business Director-Americas said, "Roy's contribution to science, industry, and society is virtually impossible to calculate or attach a value to. It was an honor to have known him. His many friends and associates throughout DuPont, the scientific community, and the fluoropolymers industry will miss him deeply."

He was an avid golfer and fisherman, and was involved in many community



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activities in Corpus Christi. Dr. Plunkett is survived by his wife, Lois M. Koch Plunkett, who lives in Corpus Christi, and two sons, Michael and Patrick.



Two pages that changed the shape of our world— these 1938 entries from the laboratory notebook of Dr. Roy J. Plunkett record his discovery of PTFE.

A NOTABLE CAREER

In addition to his work on "Teflon" PTFE, Dr. Plunkett invented or co-invented a dozen products, patented by DuPont in the U.S., and is responsible for many foreign patent filings on DuPont materials. His career with DuPont spanned 39 years.

Memorable Dates

- ◆ **June 25, 1910:** Roy J. Plunkett was born in New Carlisle, Ohio.
- ◆ **1932:** Mr. Plunkett graduated from Manchester College in 1932 with a B.A. degree in chemistry and received his Master's degree in 1933 and his Ph.D. in 1936, both from Ohio State University.
- ◆ **1936:** Dr. Plunkett joined DuPont as a research chemist in 1936 at the Jackson Laboratory.
- ◆ **April 1936:** Less than two years later, in April 1938, Dr. Plunkett discovered Teflon® tetrafluoroethylene resin.
- ◆ **1939:** He became a chemical supervisor for tetraethyl lead manufacture at Chambers Works, the largest DuPont plant at that time.
- ◆ **1945-52:** Dr. Plunkett was named superintendent of that manufacturing area, and was assistant manager at Chambers Works from 1945-52.
- ◆ **1952-60:** He served successively as section manager, assistant manager, and manager of the Plants Technical Section.
- ◆ **1960-70:** He was appointed Director of "Freon" Products Section, R&D Division in 1960, and in 1970 Director of Operations, "Freon" Products Division.
- ◆ **1975:** Dr. Roy J. Plunkett retired from DuPont after 39 years.