

Remarks of Pres. Dennis Burkey, Worcester Polytechnic Institute,
Worcester, MA, - April 1, 2004

Duane Pearsall

Inventor of the First Practical Home Smoke Detector

An engineer, inventor, and entrepreneur, Pearsall developed the first practical home smoke detector, which is credited with saving some 50,000 lives from residential fires over the past 30 years. Like many great discoveries, the device came about almost by accident. Pearsall had founded Statitrol Corp. to make static control devices for dark rooms. While testing a prototype, he noticed that smoke from a technician's cigarette would cause a meter that measured the relative concentration of ions would instantly drop to zero. "By accident, we had discovered how to make an ionization smoke detector," he said in 1996.

Pearsall found that a Swiss company had also developed an ionization smoke detector, but it required too much power and too much radioactive material to be practical for use in homes. With the addition of a battery, Pearsall's detector became the first battery-powered home smoke detector listed by both Underwriter's Laboratory and Factory Mutual, and his company grew substantially as smoke detectors became a common fixture in homes everywhere. "It was a source of considerable satisfaction to learn that about then many instances throughout the country in which our devices were credited with saving lives, sometimes of whole families," Pearsall noted.

Pearsall's contributions to fire safety have won him many awards and honors. In 1976, President Gerald Ford presented him with the National Small Business Person of the Year award. In 1980, the Society of Fire Protection Engineers recognized him as Fire Protection Man of the Year. Pearsall was a charter member of WPI's Fire Protection Engineering Board of Advisors and has been a great support of the University's fire protection engineering program. The university has honored him with an honorary doctorate and in 1987 named him the first recipient of the Center for Firesafety Studies Herrick Drake Commemorative Award.

For his visionary contributions as an engineer, entrepreneur and technological humanist, WPI is proud to present the WPI Presidential Medal to Duane Pearsall.

Presented April 1, 2004, at the 25th Anniversary Celebration of the WPI Center for Firesafety Studies.