THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 978 Session of 2014

A RESOLUTION

1 Honoring the life of chemist Stephanie Louise Kwolek, a true
2   pioneer for women in science whose research on polymers led
3   to the invention of Kevlar, the virtually bulletproof fiber
4   that has been credited with saving thousands of lives.

5   WHEREAS, Ms. Stephanie Louise Kwolek, a true pioneer for

6 women in science, passed away June 18, 2014, at 90 years of age;

7 and

8   WHEREAS, Ms. Kwolek was born July 31, 1923, in New Kensington

9 and graduated in 1946 with an undergraduate degree in chemistry

10 from what is now Carnegie Mellon University; and

11   WHEREAS, After graduating from college, Ms. Kwolek began

12 working as a chemist at DuPont in Buffalo, New York, and later

13 transferred to DuPont's Pioneering Research Laboratory in

14 Wilmington, Delaware; and

15   WHEREAS, In the early 1960s, research began on the

16 development of a lightweight fiber that would be strong enough

1   to replace the steel used in automobile tires; and

2   WHEREAS, In 1964, Ms. Kwolek produced a polymer solution that

3   was much thinner and watery than other polymer solutions; and

4   WHEREAS, The polymer solution was put into the laboratory

5   spinneret, a machine used to remove liquid solvent and leave

6   behind fibers; and

7   WHEREAS, The resulting fibers were very strong and very

8   stiff, several times stronger by weight than steel and unlike

9   anything made before; and

10   WHEREAS, After a decade of research, the fibers, known as

11   Kevlar, appeared in the form of bulletproof vests, made

12   available to police departments beginning in 1975; and

13   WHEREAS, A DuPont spokeswoman estimated that since the

14   1970s, 3,000 police officers have been saved from bullet wounds

15   through the use of equipment reinforced with Kevlar; and

16   WHEREAS, Since the 1970s, Kevlar has found its way into many

17   products, including car tires, boots for firefighters, cut-

18   resistant gloves, fiber-optic cables and armored limousines; and

19   WHEREAS, As Ron McBride, former manager of the Kevlar

20   Survivors' Club, a not-for-profit partnership between DuPont and

21   the International Association of Chiefs of Police, stated about

22   Ms. Kwolek, "When you think about what she has done, it's

23   incredible. There's literally thousands and thousands of people

24   alive because of her"; and

25   WHEREAS, Ms. Kwolek was the recipient of many honors,

26   including the National Medal of Technology in 1996, the

27   Lemelson-M.I.T. Lifetime Achievement Award and the DuPont

28   Lavoisier Medal; and

29   WHEREAS, She was also inducted into the National Inventors

30   Hall of Fame in 1995, the National Women's Hall of Fame in 2003

1 and the Plastics Hall of Fame at the National Plastics Center

2 and Museum in 2004; and

3   WHEREAS, According to the National Inventors Hall of Fame,

4 Ms. Kwolek's name appears on 17 patents issued between 1961 and

5 1986, the year of her retirement; and

6   WHEREAS, After retirement, Ms. Kwolek continued to share her

7 love of science and make a positive impact on the community by

8 tutoring high school students in chemistry, paying particular

9 attention to grooming young women for work in science; therefore

10 be it

11   RESOLVED, That the House of Representatives honor the life of

12 chemist Stephanie Louise Kwolek, a true pioneer for women in

13 science whose research on polymers led to the invention of

14 Kevlar, the virtually bulletproof fiber that has been credited

15 with saving thousands of lives.