

## June 2020 Her Story ENewsletter Technology Pioneers

During the 2020 pandemic, many people have been able to work from home. This radical change in our working environments has been possible because technology and video conference software is readily available and easy to use – and the spectrum exists to support it. It also is possible because many people have laptops and those laptops work with this video technology. Women helped pioneer the technology used in our laptops and the associated wireless communication. In this month's ENewsletter, we profile two of those technology pioneers: Katharine Blodgett and Admiral Grace Murray Hopper..



The first woman scientist at General Electric (GE), **Katharine Blodgett** was the inventor of invisible, or non-reflecting, glass. This glass is used extensively in cameras and other optical equipment, laptops, and smart phones. One of its first applications was in a projection lens for the 1939 movie *Gone With the Wind*. Blodgett won a scholarship to attend Bryn Mawr, where she became intrigued with math and physics, and graduated second in her class. After earning her master's degree at the University of Chicago, she went to work for GE at a time when it was almost impossible for women to get professional level jobs in corporations. With the support of her mentor and GE, in 1926 she became the first woman to earn a doctorate at Cambridge University.

In 1938, Blodgett announced her invention of non-reflecting glass. She received awards and honorary degrees for her inventions. She was the first industrial scientist to win the Francis P. Garvan Medal (1951) given by the American Chemical Society to honor American women for distinguished service in chemistry. In 2007, Blodgett was posthumously inducted into the National Inventors Hall of Fame.



Admiral Grace Murray Hopper helped develop languages for computers and developed the first computer compiler – software that translates human languages into the zeroes and ones that computers recognize. This makes it possible for almost anyone to use a computer. Hopper was also part of the group that found the first computer "bug" – a moth that had gotten trapped in a relay in the central processor.

Hopper was the first woman to attain the rank of Rear Admiral in the U.S. Navy. She received the National Medal of Technology in 1991, the first individual woman to receive the medal: The guided missile destroyer USS Hopper, honoring her memory, was commissioned by the U.S. Navy in 1997. She has been inducted into the National Women's Hall of Fame.

Hopper said she believed it was always easier to ask for forgiveness than permission. "If you ask me what accomplishment I'm most proud of, the answer would be all of the young people I've trained over the years; that's more important than writing the first compiler."

Katharine Blodgett and Admiral Grace Murray Hopper are among the more than 850 women profiled in our book *Her Story: A Timeline of the Women Who Changed America* Women's accomplishments continue to inspire and encourage us all. Continue to help us tell women's stories!

Charlotte Waisman and Jill Tietjen

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