

Abstract Submitted
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X-Ray Spectroscopy, The Ellen Richards Prize, and Nuclear Proliferation: The Inspiring Life of Katherine Chamberlain MATTHEW GERAMITA, University of Michigan — In 1924, Katherine Chamberlain became the first woman to receive a doctorate in physics from the University of Michigan. As one of the first women in the world to earn a doctorate in physics, Katherine reached a level prominence in the scientific community that few women had achieved. As a scientist, Katherine studied the outer energy levels of various elements using x-ray spectroscopy at the University of Michigan. In her thesis, she showed the potential for x-rays to reduce highly oxidized compounds and in 1925 won the Ellen Richards Prize for the world's best scientific paper by a woman. As an educator, she taught an introduction to photography course for thirty-five years in the hopes of creating new ways to inspire a love for physics in her students. As a community leader, she worked with The United World Federalists and The Michigan Memorial Phoenix Project to find peaceful uses for nuclear energy. Looking at these aspects of Chamberlain's life offers a unique perspective on the physics community of the 1920's, physics education, and the nuclear panic that followed WWII.

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