

A Lab of One's Own: Science and Suffrage in the First World War, Patricia Fara, Oxford University Press, 2018, 352 pp, ISBN-10 0198794991, ISBN-13 978-0198794998, \$24.95.

I was greatly attracted by the title of this book; setting up a lab of my own was my goal from the time I left graduate school until I was able to do so. I expected that the book would include in-depth descriptions of women scientists who did just that.

However, most of the book concerns the history of the women's suffrage movement during this period. What is suffrage? It is defined as *the right to vote in political elections*. However, discrimination against women or disenfranchisement reached across many fields both before and during World War I, as factory workers, munitions experts, medicine, sports (cricket!), as well as in areas of science—botany, geology, physics, chemistry—were discriminated against in factories, labs, and schools. The book reaches across many areas of employment but does not concentrate specifically on laboratories, chemistry or otherwise.

Chapter 10 was the most interesting to me, as it was concerned with women *chemists*, detailing the lives of Ida Smedley (1877-1944, a biochemist) and Martha Whiteley (1866-1956, a chemist and mathematician), and discussing the Chemical Society founded in England in 1841. One of the aims of the Chemical Society was to hold meetings for “the communication and discussion of discoveries and observations, an account of which shall be published by the Society.” In 1847, its importance was recognized by a Royal Charter, which added to its role in the advancement of science and the development of chemical applications in industry. Membership was open to all those interested in chemistry, but fellowship was long restricted to men.

In 1880 (20 years after its founding), the Society considered a suggestion allowing amendment of its constitution to allow the admittance of women, but it was shelved several times. In 1904 (another 20 years), Marie Curie was recommended for membership but as a married woman. She was banned as a normal fellow; however, she could be admitted as a foreign fellow.

In the first years of the 20th century, Smedley and Whiteley sent in a petition with 17 of their female colleagues pointing out that during the past 30 years, there had been an estimated 150 women who were authors or co-authors of papers in Chemical Society publications. Ironically, the major opponent of this motion was Smedley's research supervisor, Henry Armstrong, who maintained that the duty of female chemists was to produce baby chemists. FINALLY, in 1919 (after almost another 20 years), 21 females were elected to the Chemical Society.

As a matter of interest, the signatories to the 1904 petition are Lucy Boole, Katherine Alice Burke, Clare de Brereton Evans, Elizabeth Eleanor Field, Emily Fortey, Ida Freund, Mildred Gostling, Hilda Hartle, Edith Humphrey, Dorothy Marshall, Margaret Seward, Ida Smedley, Alice Emily Smith, Millicent Taylor, M. Beatrice Thomas, Grace Toynbee, Martha Whiteley, Sibyl Widdows, and Katherine Isabella Williams. Only Ida Smedley and Martha Whiteley are discussed in this book; Grace Toynbee is mentioned once. Another signer of the petition, Edith Humphrey, was an inorganic chemist, thought to be the first British woman to gain a doctorate in chemistry (at the University of Zurich). On the occasion of the 150th anniversary of the Royal Society of Chemistry, the successor of the Chemical Society, a sample of the original crystals synthesized by Humphrey for her Ph.D. were sent to them by the Swiss Committee of Chemistry, together with a modern circular dichroism spectrum of a solution of one crystal. This box of crystals remains on display in the exhibition room of the Royal Society of Chemistry.

For me as a chemist, chapter 10 was the highlight of the book. While I am deeply interested in the history of suffrage movements, the title led me to expect more coverage of chemists. A book dealing with the status of women scientists at the time of World War I and beyond is bound to be mixture of sociology and science. I feel that the science got covered up by the sociology. Other readers with more tolerance for sociology may feel differently, so they might want to give this book a try.

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