

Profile of Else L. Schulze

William B. Jensen

*Department of Chemistry, University of Cincinnati
Cincinnati, OH 45221-0172*

Dr. Else Louise Schulze was born in Cincinnati, Ohio, on 19 October 1901, one of three daughters of Louis and Emilie (née Berckhemer) Schulze. Though she enjoyed her chemistry course at Norwood High School, she originally had no intention of pursuing chemistry as a career and entered the University of Cincinnati in 1919 as a home economics major instead. However, contact with Leonora Neuffer, a Professor in the Chemistry Department, influenced her to switch into chemistry at the beginning of her Sophomore year, though the move to the College of Arts and Sciences resulted in the lost of 14 credit hours which had to be made up through honors courses in order that she could graduate *cum laude* in 1922.

Neuffer was the first woman to receive a Ph.D. from the Department of Chemistry (1916) and was also its first woman faculty member (1918-1927). During her tenure at Cincinnati, she was instrumental in attracting a number of women into the chemistry program, including two of Else's close friends, Jessie L. Cameron (B.A. '22, M.S. '24, Ph.D. '26) and Anna L. Hoffman (B.A. '22, M.S. '24).



Dr. Schulze as she appeared when interviewed in 1988.



Else (right) posing on the steps of Old Chemistry with fellow chemistry majors Dorothy Monro (left) and Anna Hoffman (center), circa 1921.

After completing their undergraduate degrees, all three women continued on in the graduate program, Else and Jessie working for the Department Head, Harry Shipley Fry, and Anna for Dr. Neuffer. Else received a Twitchell Fellowship and Jessie a Lloyd Fellowship, both at the staggering sum of \$500 a year. Fry had just published his book on *The Electronic Conception of Valence and the Constitution of Benzene* and was in the process of initiating an experimental program designed to prove, in accord with his polar theory of organic reactivity, the presence of negatively charged hydrogen atoms in certain classes of organic compounds via the study of their reactions with molten sodium hydroxide. The experimental procedure essentially consisted of passing the vapors of various organic compounds through a series of metal tubes containing molten caustic and collecting and analyzing whatever product gases came out the other end. Though she had to put up with numerous explosions and still has some small caustic burns on her hands, Else survived, earning her M.S. degree 1924 and her Ph.D. degree in 1926. Both theses were entitled "The Liberation of Hydrogen from Carbon Compounds" and both resulted in papers published in the *Journal of the American Chemical Society*.



A student-faculty outing in the hills of Kentucky, circa 1923. Dr. Oesper and Dr. Neuffer are seated at the far right. Else and her close friends Jesse Cameron and Anna Hoffman are in the center row, second, third and fourth from the left.

Referred to as the “alkali twins” by Dr. Oesper, Else and Jessie shared a laboratory just off Fry’s office on the second floor of Old Chemistry. She remembers Fry as an immaculately dressed man with “the manners of a perfect gentleman.” His only foible was drinking his coffee out of whatever beaker or flask was nearest at hand, so she and Jessie had to keep a sharp eye on him “for fear he would poison himself.”

Gentleman or not, Fry’s advice to the women graduating from his group was hardly progressive. The only choices offered were to remain unmarried and pursue a teaching career at some small undergraduate school (a route taken by Else’s friend, Anna Hoffman) or to forget the career, get married and have kids, and Fry decidedly favored the latter. Hoping to pursue the former, Else tried without success to get a teaching position on the West Coast during the summer after graduation. Returning to Cincinnati in the fall, she heard from some friends that an opening was available at Procter and Gamble. However, Fry – who considered

industrial work as a betrayal of academic ideals – was opposed and unable to imagine why anyone would want to work at “a place like that.” Else ignored his advice and took the job anyway, resulting in what she describes as the “best 39 years” of her life.

As the only woman chemist at Procter and Gamble, she became a jack, or rather a jill, of all trades, doing an extensive literature study of the germicidal effects of soap, lab work on water hardness, designing flavor additives for mayonnaise, testing cake recipes and even answering cooking questions when the home economist was sick. However, she was drawn more and more to the field of chemical information and eventually became the resident expert, writing several authoritative technical reports for the company and doing patent searches. She attributes her taste for this to Dr. Oesper, who had emphasized the importance of good library research, as well as good laboratory research, while she was still in graduate school. She gradually assumed control of the library and technical information services for Procter and Gamble and by the time of her retirement in 1966 was in charge of three separate libraries and a staff of 37. Today Dr. Schulze lives in retirement in College Hill with her younger sister and remains an avid reader of *The Chemical Bond*.

Publication History

First published in *Chem. Bond*, **1989**, 23, 14-16, this brief profile was based on a conversation between Dr. Jensen and Dr. Schulze conducted in her apartment in College Hill in the fall of 1988. Upon her death in 2000, Dr. Schulze left the Chemistry Library with a 1.4 million dollar endowment which has been used to fund the Else Louise Schulze Information Commons.