



YOUNG MEN AND WOMEN IN CHARGE
FOUNDATION, INC.

Volunteer Spotlight

Dr. Roger Barth

My name is Dr. Roger Barth. I tutor chemistry and math, mostly to YMWIC Scholars in grades 9 through 12.

I attended public schools in Bucks County (Neshaminy High School) and left high school a year early to attend La Salle College (now La Salle University) in Philadelphia. In my third college year, I studied at Hebrew University in Jerusalem, Israel. After graduating from La Salle, I enrolled as a graduate student at the Johns Hopkins University in Baltimore, Maryland. I was awarded a master's and doctoral degree from Johns Hopkins. As an undergraduate, I was a chemistry major. In my post-graduate studies, I specialized in physical chemistry, which is one of the five chemistry subdisciplines (the others are analytical chemistry, biochemistry, inorganic chemistry, and organic chemistry). My Ph.D. thesis was about catalysts.



I always knew I wanted to be a Chemist; my father taught college-level chemistry, and it seems to be a family tradition. My first job out of graduate school was at a company near Chicago. The part of the company I worked in was devising better exhaust catalysts for a major U.S. automobile manufacturer. We also had to devise rapid, inexpensive tests to evaluate catalyst candidates. In 1985, I was selected for a permanent teaching position at West Chester University.

I am now retired after a 36-year career as a chemistry professor at West Chester University. I am also an author; I wrote three books about the chemistry and technology of beer brewing.

In research, failure is much more common than success. Thomas Edison is quoted as saying, "I have not failed 700 times. I've succeeded in proving 700 ways how not to build a lightbulb." Some of my own recent research has involved measuring the color of cloudy beer. I had a method that sort of worked, but only if the cloudiness was very light. While I was failing with that project, I came up with a simple and rugged way to measure color in clear beer. To establish the validity of this method, I teamed up with a mathematician to do a statistical comparison of the standard method and our new method. Not only was this work successful, but I learned some math that I didn't know.

Many of the most serious issues in our world need scientific solutions. A very significant fraction of our neighbors and fellow citizens are ignorant about or hostile to science. The only remedy for this lack of knowledge is to raise up a generation of students who know the importance of science. We need diversity as well as numbers to get the message across. I have been tutoring with YMWIC for two years and find meeting and working with the Scholars to be most rewarding.