



American Research & Testing's Boggs

## One chemist's story: Forsaking the halls of academia for entrepreneurship

Every entrepreneur has a story to tell, and Rita R. Boggs, president of American Research & Testing, Gardena, Calif., is no exception.

A native of New York City, Boggs received a B.A. degree in chemistry in 1959 from Notre Dame College, Staten Island, and upon leaving college, became a nun. She taught high school chemistry and physics at Notre Dame High School in Schenectady, N.Y., and along the way received a master's degree in chemistry in 1967 from Union College, Schenectady. She then taught chemistry and physics at Notre Dame College for two years. In 1969, she decided to attend the University of Pennsylvania as a full-time graduate student. "During these years," she recalls, "it never occurred to me to start a business. I didn't know anyone who had except my uncle, who had started a private high school."

Boggs left the convent in 1973, after completing her Ph.D. in physical chemistry at the University of Pennsylvania. She then did two years of postdoctoral research at Cornell University. For the next four years, she worked as a research chemist and received management training at Colgate-Palmolive's R&D Center in Piscataway, N.J.

Boggs decided to try working in management. She was hired as assistant vice

president of U.S. Testing Co.'s California division. As an easterner, Boggs found living in Los Angeles a new experience. And, "Although I enjoyed the management aspect of my job," she says, "I found that opportunities for advancement are [often] limited in small companies."

As she was thinking about her next career move, friends suggested that she start her own business, a consulting and testing lab. "At first, it sounded preposterous to me," she says, "but I gradually began to think about it some more. I began to consider how to do it financially. I quickly dismissed doing it in my home, since having chemicals around one's home didn't seem very sensible."

Boggs scanned the newspapers for inexpensive industrial facility rentals. In June 1982, she rented space in an industrial park in Gardena, about 15 miles south of Los Angeles, bought equipment, and opened for business in October 1982 using money she had saved and a loan from her family.

The first year, Boggs went without salary, supporting herself by teaching at night at El Camino College in Torrance, Calif. To launch her company, she purchased a mailing list of 10,000 businesses in Los Angeles County and mailed computer-generated literature. "By do-

ing so, I had primed the pump sufficiently to get started," she says.

Her very first job as an entrepreneur was testifying as an expert in a legal case involving a paint job on an automobile—an individual had sued a company claiming that he didn't get the paint job he was promised.

American Research & Testing grew carefully and slowly. Boggs eschewed bank loans, and the company still has no debt. As the company started earning money, she added new equipment and repaid personal loans. The company moved seven years ago to a 3,500-sq-ft building in that industrial park in Gardena.

Today, American Research & Testing has nearly 400 clients and a staff of four full-time chemists. The primary area of Boggs' work is in the general category of problem solving. For example, she says, "Materials such as plastics fail because compounds like ultraviolet inhibitors have been omitted from formulations. We do the troubleshooting on these kinds of problems. Along this line, we have developed a number of products for clients. One such product is both an insect repellent and a sun-screen. Another product was developed for use by a movie stuntman which he can apply to himself and then set himself on fire without getting burned."



Although not a major part of the company's activities, her firm also does some of what Boggs calls "legal work—if there is a dispute that somehow involves chemistry, we might get involved."

Finally, the company determines compliance of materials with military, federal, or company specifications. "Generally, we have found that our customers are not only interested in the chemical composition of materials, but are also interested in their performance properties, which we also study,"

Boggs says. One recent project involves examining new composites, currently used in military applications, as possible materials for improved motorcycle helmets.

Although work is going well, Boggs is never overconfident. "It is a fallacy to think that because you are smart, or perhaps smarter than all the other chemists you have ever known, everyone will come flocking to you," she says wryly. "Word-of-mouth referrals have played an increasingly important role in generating business for us, but marketing our services remains one of the most difficult aspects of running the business.

"I think there are some problems inherent in running a chemistry service business," muses Boggs. "Much of the chemistry service business today is in the area of the environment, which is very much associated with regulatory aspects. As a result, there are many companies that simply want a sheet of paper from you indicating that their product or waste, for example, is in compliance with the regulations. Cost is primary, and whether your determination is correct doesn't really matter. The value of chemistry is not fully appreciated. The question is rarely asked as to whether you are a good chemist." To avoid this syndrome, she says, people might want to consider selling a chemical product rather than starting a service company.

To people who might "wonder about forsaking the halls of academia for entrepreneurship," Boggs says, "I assure you we have opportunities for creativity in chemistry every day in the week. Many of our clients are manufacturers of products but have little technical know-how if something goes wrong. It becomes our job to design experiments that will solve their problems. This work brings a lot of intellectual satisfaction."

Throughout these past 12 years, Boggs has remained active in the Southern California Section of the American Chemical Society. She also finds time to teach college-level chemistry at the California Academy of Math & Science (CAMS), a public high school located on the campus of California State University, Dominguez Hills. CAMS has as its mission to increase the participation of underrepresented minorities and women in the sciences.

On the personal side, Boggs has remained single. In addition to devoting herself to her company, she spent a good deal of time caring for her parents. In 1993, she was diagnosed with breast cancer and had surgery, radiation, and chemotherapy. Of these personal trials in her life, Boggs says, "I was always grateful that I had my own business, which allowed me to take the time that I needed for my family and myself.

"As I look back on it now," she adds, "I only wish I had started sooner."