Air of Excellence

Anne Roby, PhD, credits her engineering education with her rise at an industrial gases company.

Before she embarked on a career that took her from the Gulf Coast to Shanghai, Anne Roby ’86 had to clear a hurdle closer to home. As a Chemical Engineering major at Villanova, she faced a daunting challenge courtesy of Robert White, PhD, then chair of the department. “We had a rigorous lab course, and Dr. White was one of the professors,” Dr. Roby recalls. “He was famous for not settling for anything less than excellence. He wouldn’t tolerate sloppy data or a misplaced comma. Our work had to be perfect.”

MOVING UP, MOVING ABOUT

That drive for excellence has propelled Dr. Roby throughout her career, including her latest role as senior vice president at Praxair Inc., a leading industrial gases company. She oversees Praxair’s operations in engineering and project execution, procurement, research and development, market development, sustainability, global strategic sales, electronic materials and safety, and health and environment.

After completing her doctorate in Chemical Engineering at the University of Delaware, Dr. Roby started at Praxair in the research and development of new uses for gases in the chemical industry—work for which she was granted four patents. She was then tapped to be the global marketing manager for the chemical and refining markets. The one downside for Dr. Roby: The job required lots of travel. As her family was growing to include three daughters with her husband, Larry, Dr. Roby decided to move into a position in sales and business management in Houston. The new role brought new challenges. “Houston rises and falls with the prices of oil and natural gas—changing fivefold during my time there,” Dr. Roby says. “We also went through the Enron crisis. It was incredible to see how quickly things can change. It was a real wake-up call to all industries about the importance of ethics and compliance to the sustainability of a company.”

In 2011, Dr. Roby was named president of Praxair’s operations in Asia, and she and her family moved to Shanghai. “As I traveled through China, India and other countries, I worked hard to apply American safety standards while also respecting local norms,” she says. “Finding the right balance was sometimes difficult, but it is one of the achievements I am most proud of.”

RETURNING TO HER ROOTS

Dr. Roby draws from her experiences to further strengthen the College of Engineering’s reputation for excellence. As a member of the College’s Advisory Board, she shares her expertise and advises administrators on industry trends.

“As part of a subcommittee that advises the College’s Career Compass professional development program, Dr. Roby provides content on topics such as diversity and ethics, and has been, says Keith Argue, the College’s assistant dean of External Relations, a great advocate for students. “Dr. Roby has opened up avenues to internships and jobs at Praxair, and she has spoken to students about coming up through the technical ranks and then going into management.”

As a senior executive, Dr. Roby sponsors Praxair’s participation in the Resilient Innovation through Sustainable Engineering (RISE) Forum. This College initiative brings together technical leaders from across industries to promote corporate sustainability practices, and it engages Sustainable Engineering graduate students in real-world projects. “RISE helps us understand the academic thinking around sustainability,” Dr. Roby says. “At the same time, we bring to the forum our company’s needs and approaches to sustainability.”

The critical thinking and innovative team skills that Dr. Roby developed at her alma mater have powered her to success, and she wants the same for current students. “Villanova taught me to ask questions and look more deeply,” she says. “I stress this approach with students, even as they face new problems.” She knows that no Villanova engineer would settle for less.