

Roberto A. Sánchez-Delgado (1950-2015)

Roberto A. Sánchez-Delgado was born in Caracas, Venezuela, in 1950 to parents with long Venezuelan roots. Son and brother of lawyers, Roberto would soon challenge the family tradition to become a scientist. He attended high school at the Santiago de Leon School where he emerged as an outstanding student and received a number of awards. Inspired by his uncle “Matoyo” (an agronomist with whom Roberto used to spend entire summers of his childhood studying the behavior of insects) and his high school science teacher, Prof. Toro, Roberto enrolled in the Chemical Engineering program at the Central University of Venezuela in 1968. Due to the political situation of Venezuela and the occupation of the university by guerrilla rebels supported by Fidel Castro, in 1970, Roberto quit from his undergraduate program and moved to London to study at the Imperial College of Science and Technology; this would be a major milestone in Roberto’s scientific career. There, he graduated with a Bachelor of Science in Chemistry in 1973 and later joined Prof. Sir Geoffrey Wilkinson’s group for a Ph.D. That same year, 1973, Prof. Wilkinson would receive a Nobel Prize in Chemistry for his work on organometallic

chemistry. In an interview, Roberto described Prof. Wilkinson as “a peculiar man, an exceptional mentor and one of the greatest chemists of the 20th century.” Over time, Roberto’s lab mates during the doctorate became some of his life-lasting best friends: Ernesto Carmona, Dick Andersen, Bruno Chaudret and Richard Laiz; all of

EDUCATION

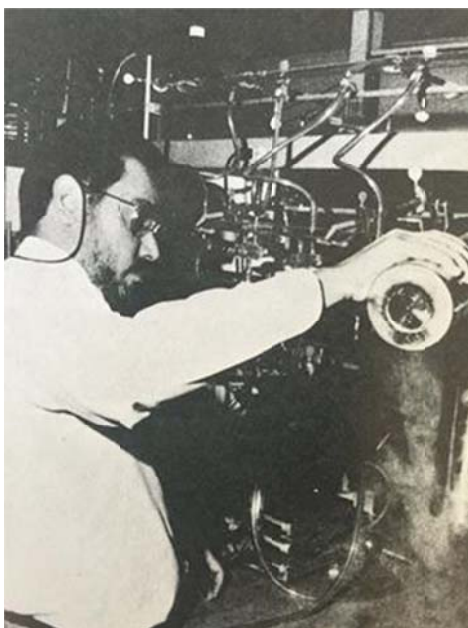
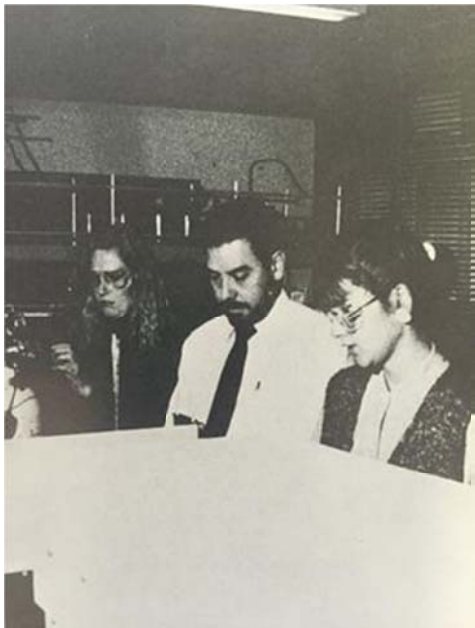
B.Sc. in Chemistry with Honors (1973) and **Ph.D. in Inorganic Chemistry** (1976), Imperial College of Science and Technology, University of London, Doctoral Thesis adviser: Sir Geoffrey Wilkinson (Nobel Laureate 1973) (Development of ruthenium hydroformylation catalysts).

Postdoctoral research associate (with Prof. John A. Osborn) at Louis Pasteur University Strasbourg, France (1976-1977) (Chemistry of zirconium hydrides and alkyls).

CAREER

- Brooklyn College CUNY, Associate Professor 2004-2008; Professor 2008-2015
- Chemistry Center of the Venezuelan Institute for Scientific Research (IVIC), Caracas, Assistant Professor (1977-85), Associate Professor (1985-1988) and Full Professor (1989-2004).
- Visiting Professor at the Universities of Ulm, Zaragoza, Seville, Berkeley, Columbia, International Center for Science and Technology, Trieste, Institute of Catalysis CNRS in Lyon, and Natural Museum of Natural History, Paris.
- Member of the Special Commission of the United Nations (UNSCOM) for the elimination of weapons of mass destruction in Iraq (1991-99).





Roberto at IVIC working with students (left), and preparing a vacuum-nitrogen line for a chemical synthesis (right).

them well-recognized scientists. Roberto graduated in 1976 and completed his scientific training with a postdoctoral position at the Louis Pasteur University of Strasburg, France, under the supervision of Prof. John A. Osborn. In 1977 he returned to Venezuela as an Assistant

Professor at the Chemistry Center of the Venezuelan

Institute for Scientific Research (IVIC) in Caracas, where he was promoted to Associate Professor in 1985, and to Full Professor in 1989. He also became Vice-Director at IVIC. To this day, the scientific legacy of Roberto flourishes in Venezuela. Although his humility was always striking, he became one of the most reputed scientists of his country, trained more than 30 Ph.D. students, most of whom still remember Roberto as the person who changed their lives. Roberto received numerous awards for his multitude of achievements; some as relevant as the “Orden Francisco de Miranda” by Venezuelan president Carlos Andrés Pérez in 1989, or the Venezuelan National Prize in Science in 1999. Roberto was also the only Latin-American scientist to be part of the Special Commission of the United Nations (UNSCOM) for the elimination of weapons of mass destruction in Iraq from 1991 to 1999. Roberto was a visiting professor at many universities and research centers all over the world such

AWARDS

- Claire Tow Distinguished Teacher Award for the year 2012-2013
- Leonard and Claire Tow Professor (2007-2009) at Brooklyn College CUNY
- Venezuelan National Prize in Science (1999)
- John Simon Guggenheim Fellow (1998)
- Lorenzo Mendoza Fleury Award in Science from the Polar Foundation, Caracas (1989)
- Manuel Noriega Morales Award in Physical Sciences from the Organization of American States (1987)
- Member of the Venezuelan Academy of Sciences and of the Latin American Academy of Science



as Columbia University and the University of California, Berkeley (US), the University of Sevilla and the University of Zaragoza (Spain), CNRS Catalysis Institute, Lyon and the National Museum of Natural History, Paris (France), the University of Ulm (Sweden) and the International Center for Science and Technology, Trieste, Italy to mention a few.

Irreconcilable differences with the regime of President Hugo Chávez forced him to leave Venezuela in 2004. That same year, Roberto joined Brooklyn College, CUNY, in New York City, where he was promoted to Full Professor of Chemistry in 2008. In New York, Roberto soon became a vital member of both the Chemistry Department of Brooklyn College and the Graduate Center of CUNY, where he served as Chair of the Inorganic Chemistry Sub-Discipline of the CUNY Ph.D. Program. In a short period of time he was able to graduate 3 Ph.D. students, train 5



Roberto with his family.

postdoctoral researchers and mentor more than 15 undergraduate students. Roberto identified strongly with CUNY's mission and had a real passion for educating the less favored segments of the population. He was a particularly caring mentor and effective teacher, qualities that allowed him to be honored as the Leonard and Claire Tow Professor (2007-2009) at Brooklyn College, and the Claire Tow Distinguished Teacher Award in 2012, among others.

His scientific work focused on catalysis and medicinal chemistry. He produced more than 130 articles in peer-reviewed journals, 5 patents and one book. Roberto's interests were aimed at studying homogeneous and heterogeneous catalytic hydrogenation reactions (of interest in the manufacture of cleaner fossil fuels), and discovering new chemotherapeutic agents for chloroquine-resistant malaria, other

parasitic diseases, and cancer.

In 2009 Roberto was diagnosed with a renal metastasis from a cancer that he previously suffered in 2000. Despite the seriousness of the medical condition, he maintained an admirable and impressively positive attitude. His optimism, the support from friends and family, and especially, the invaluable courage of his wife Victoria and daughter Eugenia, allowed him to wrestle with the disease for almost 7 years. We lost Roberto on December 13th, 2015. His professional and personal wisdom, his conviction to advocate for fairness and justice, his endless humility, his loyalty as colleague, mentor and friend, his devotion to students, his scientific legacy, and his commitment as husband and father will always remain with us.

Roberto's Quotes:

"I don't believe in the genius researcher alone doing great discoveries; it's all about the team"

"A scientist doesn't have to be divorced from art. Science, as activity, is an art"

"I don't do anything on my own. There are always young and enthusiastic people in my lab doing all the work"

"I have always been lucky. I had great mentors and great students; as a result, I pretty much did nothing"