

## Robert Sánchez-Delgado (1950-2015)

This special issue of the *Journal of the Mexican Chemical Society* is a tribute to an extraordinary scientist, person, mentor, colleague and friend, the most complete Latin-American Inorganic Chemist of this time Prof. Roberto Sánchez-Delgado who enriched the lives of many of us in different ways and is greatly missed.

As a Guest Associate Editor, I want to thank the contribution made by Prof. David Cole-Hamilton and Prof. Maribel Navarro for the elaboration of this Preface whose were colleague and student of Roberto respectively.

Lena Ruiz-Azuara

Roberto Sánchez-Delgado was born in Caracas-Venezuela, March 28, 1950; started to study Chemical Engineering in Venezuela, but political strife, which engulfed the University, caused him to move to Imperial College London for a BSc in Chemistry. He remained at Imperial College to study for his PhD in the group of Sir Geoffrey Wilkinson, who had just won the Nobel Prize in Chemistry for his work on the structure of ferrocene and the development of modern organometallic chemistry. Roberto worked under the day-to-day supervision of John S. Bradley on the use of ruthenium complexes of triphenylphosphine for the hydroformylation of alkenes, which started a life-long interest in homogeneous catalysis. At that time Roberto was slim with long wavy black hair and a long black leather coat that was the envy of all of us in the group! From London he went to work with John Osborn, another former Wilkinson student with whom John Bradley had also worked, in Strasburg before returning to a lecturing position at the Venezuelan Institute for Scientific Research, Caracas.

Back in Venezuela he continued his work on homogeneous catalysis, especially on the selective hydrogenation of C=O double bonds, using complexes similar to those he had used at Imperial College. This was very important work and my last PhD student built part of her PhD around Roberto's discoveries. Being in Venezuela, Roberto started to work on projects of international importance with a local application.

Crude oil from the Orinoco basin contains significant levels of sulphur, so he applied his knowledge of hydrogenation chemistry to hydrodesulphurisation even of the most difficult substrates. He also started to look at the use of organometallic complexes. Additionally, he was a pioneer in introducing the applications of metal-based drugs to attack parasitic diseases

such as malaria, Leishmania and Chaga's disease, an illness that kills millions of people mostly in the tropical countries around the world, including his born country.

Meanwhile he was climbing up the hierarchy of the University and became well known in political circles, effectively becoming a scientific adviser to the Government. This led to perhaps the most important chapter in his scientific career and one which sets him on a pinnacle above all other scientists I know. He was invited to join the team of weapons inspectors in Iraq after the first Gulf War. The remit of the team was to find any and all weapons of mass destruction held by the Iraqis and arrange for their destruction, which they did very effectively.

Some years later, I asked him if it would have been possible for Iraq to have had weapons of mass destruction when George W Bush and Tony Blair were considering invading Iraq to initiate the second Gulf War. He replied; "No. We found them all and had them all destroyed. Iraq did not have the capability to rebuild them". This, of course, turned out to be true. If only George Bush and Tony Blair had listened to Roberto and others like him including Hans Blix, the world would be a completely different place now.

Prof Sanchez Delgado will not only be remembered as an outstanding scientific; he was an excellent teacher (maestro) he has always taught with great easiness, even the most complicated chemistry subjects. As a mentor of many students he taught us how to work hard to find the best in our research project, with seriousness and honesty, he also was our friend finding the way to teach us to believe in ourselves. In 2003, he was awarded for the Center for Advanced Studies at IVIC for being the Mentor of the 75% of the graduated Ph.D. students of the Chemistry Centre. His legacy is a privilege.

Prof. Sanchez Delgado was a clear leader with great commitments with his institution (IVIC). Indeed, he held several important administrative positions some as relevance as the Deputy Head of the Chemistry Center, Deputy Head of the Technology Center, Vice-President of the Institute and Head of the Materials Science Department. By 1998 Dr. Horacio Vanezas and Prof. Sanchez Delgado made a major breakthrough by the country by creating the most valuable company for the development and commercialization of blood derivatives in Venezuela, known as Quimbiotec.

Prof. Sanchez Delgado was recognized with several scientific and academic awards and distinctions some of these were

Member of Venezuelan Academic of Science, and of the Latin America Academic of Science, the Order of Francisco de Miranda, Annual Prize in Chemical Sciences, Manuel Antonio Noriega Morales Award in Physical Sciences, (Organization of American States), Lorenzo Mendoza Fleury Prize, (Polar Foundation), Annual Prize in Biological Sciences, Annual Prize (Honorable Mention) in Chemical Sciences, John Simon Guggenheim Fellowship (Guggenheim)

Thanks Prof. Sanchez Delgado for the generations left of talent and well educated researcher in Catalysis and Bioinorganic Chemistry and for Latin American Scientific Community the SiLQCOM (Latin American Symposium on Coordination and Organometallic Chemistry), which so far, five symposia have been already organized, the first one was assembled in Colombia, then in Venezuela, the third one was in Chile, followed by Mexico and the last one, was last year in Brazil, the six edition will be held in Argentina in 2017

His close involvement with the Venezuelan Government led Roberto to leave Venezuela when the regime changed there. He was appointed to a position in Brooklyn College, New York; later on he was honoured with a Claire Tow Distinguished Teacher Award in 2012.

*He continued his research on homogeneous catalysis and medicinal applications of organometallic compounds until his sad and untimely death in December 2015 from cancer. I was in e-mail contact with him just a few days before he died and he remained upbeat and positive.*

*We have lost a dear friend and colleague, a fine chemist, a much loved mentor of many students and a man who walked on the world stage. He is very sorely missed by all of us, but especially by his delightful wife, Victoria, and daughter, Eugenia, both of whom attended the memorial symposium for which this issue provides an enduring legacy.*

David Cole Hamilton

*In 2010, the most recognized researchers in the area of catalysis in Venezuela paid tribute to him by his immeasurable contribution to the catalysis in Venezuela. For me, you are My Mentor, Best Teacher, and Great Friend. You are Immortal in my Thought and Heart. Thank you.*

Maribel Navarro