



## EDITORIAL

### Special Issue in Memory of Professor Luis Moreno, 1942-2022

This special issue of *Nexo: Revista Científica* is dedicated to the memory of Professor Luis (“Lucho”) Moreno from KTH Royal Institute of Technology, Sweden, who passed away unexpectedly on January 26, 2022, at the age of 79. The passing of Professor Moreno is a significant loss to the radioactive waste management community. The special issue includes research articles contributed by researchers who were students and colleagues of Professor Moreno.

Professor Moreno earned the diploma of *Ingeniero Civil Químico* at the University of Concepción (UdeC), Chile and his PhD degree in Chemical Engineering in 1982 at the Department of Chemical Engineering, KTH Royal Institute of Technology, Sweden. At KTH, he earned his *Docentur*<sup>1</sup> (i.e., being a Docent, docentship) and the position of Professor, both in Chemical Engineering.



Most of his work over the last three decades was directed towards applying chemical engineering thinking and principles, including transport phenomena, chemistry, and thermodynamics of processes in natural systems. His research team has studied the release and fate of contaminants in soils and sub-soils using field and laboratory experiments and modelling. In addition, his research team has studied metal release and transport for mine tailings, transport and microbially mediated degradation of organic contaminants from oil spills, radionuclide migration from final repositories to the biosphere, radon escape from rocks to buildings and many other phenomena.

From 2001 to 2011, Professor Moreno participated in a research cooperation programme between KTH and the National University of Engineering (UNI), Nicaragua, financed by the Swedish International Development Cooperation Agency (Sida), Sweden. He supervised four postgraduate students that were staff members at UNI. The results of his cooperation include five research theses (1 PhD and 4 Licentiate of Engineering<sup>2</sup>) and several conference papers and journal articles. He served as a visiting Professor in the MSc programme in Chemical Engineering at UNI.

Since 2011, Professor Moreno was a visiting Scholar at the Department of Chemical Engineering, University of Antofagasta (UA), Chile. The National Commission for Scientific and Technological Research (CONACYT), Chile, funded the research visits. His research activities included multi-species modelling of caliche heap leaching.

Professor Moreno was the author of several book chapters, technical reports and nearly 150 research articles. He was a well-known and highly respected specialist on contaminant transport in fractured media. He was a valuable member of the editorial team of *Nexo: Revista Científica* (2004-2008), as well as the

<sup>1</sup> <https://ki.se/en/about/academic-appointments-and-docentur>

<sup>2</sup> <https://www.kth.se/en/studies/phd/student/examination-and-degree-1.527043>

Advisory Committees of the Process Hydrometallurgy (HydroProcess) and Copper Hydrometallurgy (HydroCopper) Conference Series. Currently, he was serving as an Emeritus Professor at KTH.

Professor Moreno was very generous and easily approachable, never stingy with his time and ideas towards students, co-workers, and colleagues. His postgraduate students all remembered the tremendous efforts he always made in their regular discussions, in patiently and presenting his enlightening thoughts, providing precise references, and making concepts and problems simpler and completely understood.

Those who knew Professor Moreno regarded him as a true scholar and a hard worker, in very disciplined and rigorous ways, who had a great passion for chemical engineering research and education. But there was another side of him which was less widely known. After a long day at work or a seminar, he was always ready for some interesting and stimulating gatherings with colleagues, friends, and students, talking about matters, which were not limited to chemical engineering, for instance, news around the world, politics, and personal lives. His subtle sense of humour was rather remarkable, and he used it to approach and address many problems and situations encountered.

His students and colleagues remembered his kindness, gentleness, and loyalty nostalgically and shared not only many moments of brilliant and lively conversations with him but also his precious friendship.

*Lucho, you will be missed!*

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