



## Biography Prof. Mauricio Leonardo Torem

Professor Maurício Leonardo Torem (June 29 1954) is a metallurgical and industrial engineer. He undertook his bachelor and master degree at the Department of Materials Science and Metallurgy (nowadays, Department of Chemical and Materials Engineering) – Pontifical Catholic University of Rio de Janeiro in 1977 and 1980, respectively.

During that time, he worked in mineral processing and extractive metallurgy. Particularly in his bachelor project, he developed a well-recognized scientific work dealing with a manganese and iron oxide containing ore and its selective reduction with green coal. During his MSc degree, the effort was also very successful on his investigation: “On the effect of some additives in the electro crystallization of metallic manganese in sulphuric medium”.

By the end of 1980, he worked for White Martins in its calcium carbide plant until 1983, when he was invited to move back to the Pontifical Catholic University of Rio de Janeiro (PUC-Rio). In his first stage at PUC-Rio (1983-1989), he also carried out his doctorate at the Department of Metallurgical Engineering – Federal University of Rio de Janeiro. His doctorate work was: “On the fundamentals of beryl flotation”; Professor Mauricio was the first DSc student of the well know Brazilian Professor Antonio Eduardo Clark Peres, well known as Professor Toninho.

After finishing his DSc work, Professor Maurício has started to supervise students in extractive metallurgy, particularly, in subjects related to the fundamentals of surface chemistry, flotation and recycling. Away from these areas, he also developed several projects on mineral and environmental biotechnology applied to the flotation of specific Brazilian minerals and ores. Moreover, he well thought-out

the use of hydrophobic strains and biomasses for metals uptake from liquid streams.

As a result of his research and efforts, he has been receiving many grants and support from CNPq, CAPES and Faperj (Brazilian research agencies) and from mining companies.

He was also appointed “*CNPq Productivity Researcher*” several times and is, at the moment, in the top level: 1A; moreover, he was appointed “Scientist of Rio de Janeiro” for several times by Faperj (The Rio de Janeiro State Research Foundation - Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro).

Professor Maurício Leonardo Torem was also Editor-in-Chief of the well Elsevier Periodical – *International Journal of Mineral Processing* and is still member of the editorial board of prominent journals.

It is appropriate to point out that, during all these years, Professor Maurício L Torem has been playing an important role as an active member of national and international scientific and technical committees of congresses, workshops and seminars related to mineral processing, recycling and circular economy.

At the Pontifical Catholic University, he offered several courses on mineral processing, aqueous fundamentals and electrometallurgy in undergraduate and graduate levels. He has also been involved with academic and administrative activities at PUC-Rio. Furthermore, supervised many graduate and undergraduate students. He published many articles in important scientific journals and conferences in his main research areas.