VICTOR F.B. de MELLO

A path to be understood and followed

Victor Froilano Bachmann de Mello came from a rather different background. He was born in Pangin, Goa, at that time a Portuguese ultramarine colony, now India, on May 14th 1926. His father was a Saraswat Brahman, whose family originally lived in northern India by the now vanished Saraswati river, migrated to India's west coast towards Goa, and was converted to Christianity, in 1579. This first ancestor was called Parbu Sinai who took the name of a fidalgo stationed in Goa from 1572 to 1580, D. Francisco de Mello. His mother was Swiss German, who had been head of a secondary school in Switzerland and friend of Maria Montessori, before she met Victor's father and left for Goa.

He and his brothers and sisters were educated at home and sent to a British boarding school linked to Cambridge University in India when the outbreak of World War II was foreseen. His education followed by a period at the Interscience Course of Ewing Christian College in Allahabad, and then the Forman Christian College in Lahore, Punjab, now Pakistan.

1 - Victor at his high school graduation in India

With the impossibility of going to the Zurich Federal Institute of Technology, ETH, due to the war Victor went to the Boston and an intense and productive participation at the Massachusetts Institute of Technology started, getting his BSc degree in June 1946, his MSc in September of the same year, and his DSc in January of 1949, both under Dr, Donald W. Taylor guidance. He left a marked influence in MIT´s stabilization of clays, which granted him a US Patent, and shear strength research projects.

2 - Victor at his graduation at MIT

In the same year, he immigrated to Sao Paulo, Brazil, to work for the Light and Power Co. He then joined Geotecnica in 1951, where he conducted the design department until 967 when he started his career as individual consultant.

He immigrated to face and contribute to the immense challenges Brazil was about to face, with energy at a high demand and an enormous hydro potential. Emphasis on the idea of the priority of being a firstly a world citizen, then a civil engineer for better fulfilment and finally a geotechnical specialist for bettering engineering guided his life. His professional vision was marked by intense job-generated research/observation and lonely mental experimentation and debates, with data and interpretation published worldwide.

In Brazil Victor married Maria Luiza, and had two children Luiz Guilherme and Lucia Beatriz. After Maria Luiza passed away Victor married Maria Aparecida.

3 - Victor and Maria Luiza

4 - Victor and Maria Aparecida

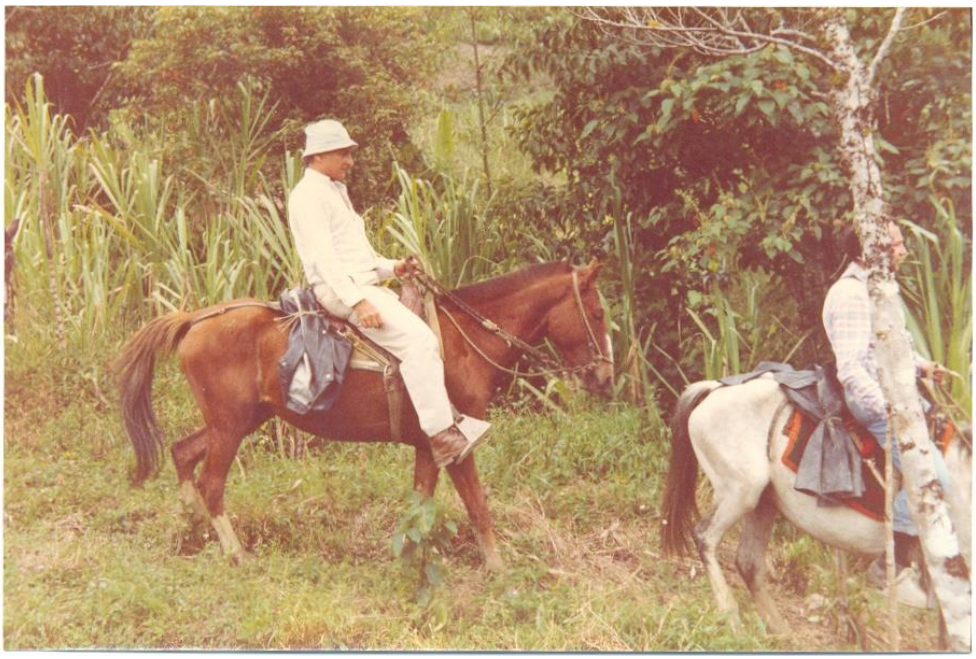
Victor returned to MIT as a Senior Visiting Professor in 1966 for a period of one year.

In the almost 60 years of Victor's career in Brazil this country grew by ay roughly 150 million inhabitants. The unparalleled speed of construction associated signified an unimaginable opportunity to give and receive direct personal contributions in hundreds of major embankment dams, thousands of high-rise buildings, hundreds of major industries, bridges, tunnels, scores of mining projects, ports, highways, railroads and subways. One of his technical passions was probability and statistics applied to engineering design philosophy, together with risk analysis.

5 - Victor at Three Gorges dam in 2000

6 - Victor inspecting a trench in a residual soil slope

7 - Victor inspecting the compacted fill in Massingir, Mozambique



8 - Victor inspecting the site in Guavio dam, Colombia

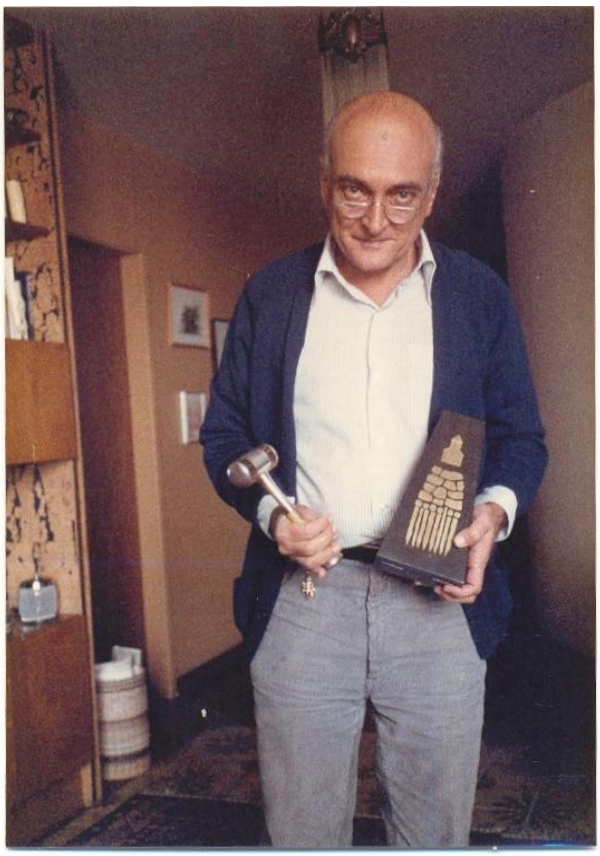
Victor used to mention that if it were not for this country, Brazil, and its multiple opportunities he would never have grown into the internationally recognised professional and personality.

Concomitantly, Victor contributed in sharing his knowledge and experience by teaching at the University of São Paulo, where he was Tenure Professor at the Faculty of Architecture and Town Planning, the School of Engineering of São Carlos, the Polytechnic School and the Institute of Geosciences, as well as at the Mackenzie University, both at its School of Engineering and at the Faculty of Architecture, and at the Armando Alvares Penteado University where he organized the curriculum and

courses of the engineering geology, soil and rock mechanics, earth works and foundation engineering.

Victor was mentor and examiner of numerous Master's, Doctorates, Professorships, Tenures, Academy nominations, in Brazil and abroad. He delivered special invited courses and lectures in the five continents.

Victor was a Member of the IIIrd World Academy of Sciences, of the National Academy of Engineering of the USA, of the Brazilian Academy of Engineering and of the Argentinean Academy of Science. His recognitions include being the 1st and unique President of the International Society of Soil Mechanics and Geotechnical Engineering as well as the 1st and unique Rankine Lecturer from the southern hemisphere to this time.



9 - Victor when elected President of the ISSMGE

Victor has published landmark technical papers on the concepts for designing embankment dams, on the behaviour of residual soils and saprolites, compacted earth fill and rock fill, on the stability analysis of slopes, on foundations, on and on concepts on how to apply creativity to soil engineering.

In an attempt to honouring Victor de Mello and celebrating his contribution to geotechnical engineering the Brazilian and the Portuguese geotechnical societies have created the Victor de Mello Lecture, the first of which was delivered by John Burland in 2008; the 7th de Mello Lecture will be delivered by Prof. Oscar Vardé in Lisbon in May 2020. The Goa branch of the Indian SSMGE has also created a lecture, the Victor de Mello Goa Lecture, to be delivered annually, to honour Victor.

Victor was also a special human being. His love and strong links to his brothers and sisters started early in their lives through activities conceived by their parents, like an in house chamber music group, a newspaper, among others.

10 - Victor with hi sisters and brothers in a family gathering

Music, literature, dancing, wind surfing, tennis were also among his interests. Victor played the piano, and this helped him to find his way to MIT. His love to music included occidental classics, Portuguese fados, Brazilian popular music, and Indian ragas. Nature and art nurtured him. His wide cultural background led him to pursue knowledge in a multidisciplinary constellation of authors. And his habit of starting early each day included long, intensive working hours, and also leisure and sports.

11 - Victor in a train in China in 2000

Victor shared close friendship with most top level geotechnical professionals of his time, including Prof. Marsal, Prof. Zeevaert, Prof. Springall, Prof. Auvinet, Prof. Rico,

Prof. Schmitter, and so many other colleagues from the Mexican Society SMGE. It was in Mexico City that Victor presented the first of his landmark international papers, the state of the art report on Foundations of Buildings on Clays, delivered at the ICSMFE in 1969.

12 -Victor with his good mexican friend Prof. Schmitter

Professor de Mello died peacefully of a minor stroke, on January 1st, 2009, aged 82 in his home in São Paulo, Brazil, after a long process of amyotrophic lateral sclerosis (ALS, also called Lou Gehrig's disease). All Victor's technical production, as well the lectures in his honour and other interesting aspects of Victor's contribution are available at www.victorfbdemello.com.br

13 - Victor at his 80th birthday