

## Carlos Rolz Asturias



Carlos Rolz Asturias is Director of the Biochemical Engineering Center, Research Institute at Universidad del Valle. Was Dean of the Institute (1997-2000 and 2004-2009), Member of the Directive Council of the University and trustee of the Fundación de la Universidad del Valle. He is a chemical engineer (University of San Carlos, 1963) and has a Master of Science in Chemical Engineering Science from the University of California at Berkeley with a research thesis in thermodynamics of phase equilibrium carried out in the group of Dr. John Prausnitz. He was an invited professor and research fellow (1977-1978) at the Department of Chemical and Biochemical Engineering at the University of Pennsylvania in the laboratory of Dr. Arthur Humphrey and invited Lecturer at the Biochemical Engineering Department of MIT in the laboratory of Dr. Daniel Wang, under a Fulbright-Hays Fellowship, working in the area of enzymatic

hydrolysis of lignocelluloses for the production of fuels and chemicals. He has 121 scientific publications in peer reviewed journals as a direct result of his work at the former Central American Research Institute for Industry (ICAITI) from 1965 up to his retirement in 1996. The bulk of his publications deal with different areas in biochemical engineering, like ethanol and methane production, microbial biomass utilization, waste treatment and cleaner production and food processing. His laboratory was selected in the MIRCEN-UNESCO network of applied microbiology and in the UNESCO-UNEP sponsored International Organization for Biotechnology and Bioengineering (IOBB) established by Dr. Malcolm Lilly (deceased) from University College, London. He was, for sixteen years president of IOBB and invited speaker at the Biotechnology International Congress (London, New Delhi, Paris and Washington). He was in the Editorial Board of four biochemical engineering journals. He was member of the Biotechnology Committee of the International Council of Science (ICSU) under the chairmanship of Dr. Katchalsky-Katzir (former President of the State of Israel). He is a member of the Guatemalan Academy of Sciences, the Third World Academy of Sciences and the Latin American Academy of Sciences. He is editor (together with Drs. Doelle and Mitchell from the University of Queensland, Brisbane, Australia) of the book titled Solid Substrate Cultivation published by Elsevier Applied Science in 1992. He has one U.S. Patent and three Guatemalan Patents. In November 2000 he received the National Medal of Science and Technology given by the Guatemala Congress and is a member of the Distinguished Guatemalan Scientists (Comisión de Notables) from the Guatemalan National Scientific Council. In 2005 he was named Editor of Revista de la Universidad del Valle. In 2006 he was invited by ICSU to be part of the ISPRES Panel on Renewable Energy.