

EDITORIAL

Do not let the day end without having grown a bit, without being happy,
without having risen your dreams.
Learn from those who can teach you.
The experiences of those who preceded us in our "dead poets", help you walk through life.

Walt Whitman

This special issue of Electronic Journal of Biotechnology is devoted to the memory of Dr. Rodolfo Értola, one of the pioneers of bioprocess engineering in Latin America. In this issue many of its formal students, colleagues and friends have contributed to pay a tribute to the eminent professor and outstanding human being.

It has been an honour for me to act as special editor of this issue. I had the privilege of knowing Dr. Értola and my memory goes back to a not too far away encounter in Barcelona in the company of his loving wife Ana Giulietti, a friend at heart, one of his granddaughters, Dr. Fernando Albericio, Dr. Osvaldo Cascone and his wife Norma. Anita was all the time warning and at the same time pampering Dr. Értola and he let her do with a loving complicity. What a lovely evening!

Bioprocess technology in Latin America has been fostered by a very select group of professors and researchers that were route partners of Dr Értola in this pioneering task, so let me take this opportunity to do a brief remembrance of them.

Dr. Walter Borzani, who passed away in February 2008, is maybe the most salient figure in biochemical engineering in Latin America, and most certainly in his home country, Brazil. He was a distinguished professor in the Polytechnic School of the Universidade de São Paulo and after many years he was appointed Head of the Mauá School of Engineering and later on as Head of the Biotechnology Development Center in Joinville, Santa Catarina. Many of the active biochemical engineers in Brazil were his students that were rewarded by his knowledge, remarkable kindness and spirit of service. He settled the basis of the Latin American Association of Biotechnology and Bioengineering (ALABYB) that gave a significant impulse to the development of the discipline in the region. A figure always to be remembered.

Dr. Carlos Casas-Campillo, died in 1994, was certainly a pioneer in the development of industrial microbiology, biochemical engineering and biotechnology in Latin America. He was head of the National School of Biological Sciences of the Instituto Politécnico Nacional de México (IPN) and founder and Head of the Department of Biotechnology and Bioengineering at the Center for Research and Advanced Studies of IPN. A most significant contribution was the establishment of

an undergraduate program in biochemical engineering at IPN in 1957, the first program of its kind in Latin America and clearly a framework for the development of other such programs in the region.

Dr. Carlos Rolz is at present Director of the Biochemical Engineering Center, Research Institute at the Universidad del Valle, Guatemala, having been the Dean of the Institute for many years. He did a pioneering work at the Central American Research Institute for Industry (ICAITI) where he spent most of his career giving a strong impulse to bioprocess engineering in the region and establishing close ties with the productive sector. He was president of the International Organization for Biotechnology and Bioengineering (IOBB) and co-founder of ALABYB.

Dr. Vitalis Moritz, retired a few years ago from the Department of Biochemical Engineering of the Escola de Química at the Universidade Federal do Rio de Janeiro (UFRJ) where he is currently Emeritus Professor. Dr. Moritz contribution to biochemical engineering in Latin America is outstanding being one of the co-founders of ALABYB. With a very strong background in chemical engineering, he early appreciated the potential of biological systems and devoted the most significant part of his career to bring these two components of biotechnology together. He and Dr. Borzani made a most significant contribution in disseminating the discipline of biochemical engineering and established close ties with world leaders in the area, like Dr. Shuichi Aiba (Japan) and Dr. Arthur Humphrey (USA). The list of his successful students is large indeed and the contribution of them to the development of bioprocess engineering in Brazil is certainly a tribute to Dr. Moritz. His strong though warm personality, unbeatable enthusiasm and generosity has been and still is a lesson of life to many of us.

Dr. Fernando Acevedo is at present professor at the School of Biochemical Engineering (Pontificia Universidad Católica de Valparaíso, PUCV) that he founded in 1969. More than 500 biochemical engineers have been his students, representing probably the most significant contribution to the formation of human resources in bioprocess engineering in Latin America. He was the Director of the School of Biochemical Engineering in several periods and also Dean of the Faculty of Engineering and Director of Research and Advanced Studies at PUCV. Cofounder of ALABYB, he was appointed Secretary and later on President of the association. He was also Vice-President and President of the National Council of Biotechnology in Chile. His impressive contribution to the merging of life sciences and engineering is reflected in the many generations of engineers that have benefited from his knowledge and generosity.

The above mentioned distinguished professors were partners of Dr. Értola in paving the way for the development of bioprocess engineering in Latin America. Fruits have bloomed and ripened from such seed. Distinguished figures of bioprocess engineering have followed their steps in many countries of Latin America: Dr. Faustino Siñeriz and Guillermo Ellenrieder in Argentina, Dr. Willibaldo Schmidell-Netto, Antonio Bonomi and Nei Pereira in Brazil, Dr. Dolly Montoya in Colombia, Dr. Rodolfo Quintero, Mayra de la Torre, Gustavo Viniegra, Enrique Galindo and Agustín López-Munguía in México, Dr. José Luis Bauer and Marcel Gutiérrez-Correa in Perú, Dr. Livio Revel-Chion in Venezuela, Dr. Juan Asenjo, Eduardo Agosín and Rolando Chamy in Chile are but a few of the many leaders in the field following the steps of the pioneers.

I hope that this special issue of Electronic Journal of Biotechnology will give some flavour about the activity, goals and challenges of bioprocess engineering in the emerging countries of our continent.

Andrés Illanes
Guest Editor

