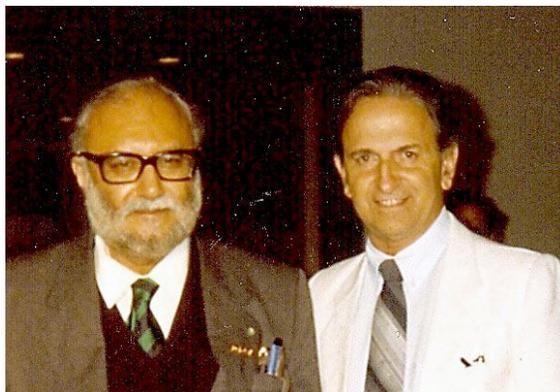


IDEALS AND REALITIES: WORKING WITH ABDUS SALAM

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I first met Abdus Salam when by a stroke of fortune I shared an office with him in the Physics Department of Carnegie Tech in Pittsburgh in the mid 1960s. I was then a Guggenheim Fellow with the group of the late Roman Smoluchowski and he was there on a brief stay. We met again some years later in Stockholm for the creation of the International Science Foundation of which we were common proposers. I remember he and I were engaged (as usual) in a friendly dispute when Salam, who was sitting beside me, said he had no influence on my proposal to model the International Science Foundation after the ICTP. Of course people laughed when I claimed not to be under the spell of Salam.



Little did I know that this man would change both my life and that of thousands of scientists from the Third World! And more, that his magic spell made of ideals and realities, dreams and incredible accomplishments would bring a new vision of scientific and technological liberation to so many countries.

After Stockholm he invited me to Trieste as a member of a five-year planning committee of ICTP. For more than 15 years I worked closely with him to organize several areas of applied interdisciplinary sciences like biophysics, medical physics and soil physics for which he gave full support and his enthusiastic collaboration. When I first proposed a series of colleges in these areas there was some criticism that they were out of the scope of ICTP, but he gave his firm approval, fully confident that interdisciplinarity and applied science are essential for the development of Third World nations. And he accepted to be the Honorary President of the Third World Association of Medical Physics (TWAMP), sponsored by ICTP. I had the great opportunity to discuss with him many aspects of the Third World Academy of Sciences (TWAS) and a possible platform for candidacy to UNESCO. One of the dreams then was to have a UNESCO satellite beaming educational, cultural and scientific programs to the Third World in close connection with educational production centers located on different continents. The idea of a web to help jump the barriers of underdevelopment was very clear in his mind. The foundation of TWAS was a success, influencing and creating new leadership all over the world. Never before had the scientific community been so united about science and technology as the basis for progress and liberation from the chains of poverty and ignorance through self-reliance inspired by the creativity that often comes with science.

Salam was working all the time writing, talking directly to world leaders and most of all supporting young scientists who came from all over the globe to ask for orientation and help. Many came just to meet him personally, as if on a pilgrimage of the modern era inspired by love of knowledge and science. When he had more time in the beginning, I remember how we interviewed one by one all participants in the biophysics and medical physics colleges and how he listened to accounts of their difficulties at home, why they had chosen to come to biophysics or medical physics, demonstrating the tremendous personal dedication and authenticity of a man who was one of the greatest scientists of our century.

I always hoped that he would be nominated for the Nobel Prize for Peace but it seemed that fighting the war on poverty and underdevelopment was less important than being involved in real wars with guns and bombs. So this never happened, despite some timid proposals by some of us from the Third World.

Salam, as a tireless envoy for the cause of science and development, traveled all over the continents. I had the privilege of accompanying him to Mexico and China and saw the tremendous influence he exerted to help the foundation of institutions and further their association with Trieste and among themselves in regional webs.

One aspect that I would like to stress in this memorial was his profound respect for culture, related not only to science but to art. When I mentioned to him that science should be important for the preservation of works of art from the Third World, one of our greatest treasures of creativity in China, India, Egypt, Mexico and many other countries, he gave his full support for the organization of a unique college on the theme, despite hard financial problems. This was held and was a success, paving the way for the creation of new methods for preservation, restoration and archaeometry. Not many would have had the vision and sensibility to back these ideas.

My great joy was when he began to work in biophysics, proposing an audacious solution to the problems of chirality in biomolecules. As you know, his proposal tried to bring his original contributions on elementary particles to molecular biophysics and the problems of the origin of life. This is still an open question, but we should not forget the dictum that “God speaks through the mouth of geniuses”.

When I last saw him in Oxford he was very ill. Holding his trembling hands, I could still see in his eyes that incredible shining glitter that made his presence unforgettable to everyone who had the privilege to meet him personally and to be inspired by him.

Abdus Salam was the messenger of peace, the great scientist, the great statesman of science who called on all Third World scientists to unite for the cause of freedom of knowledge and peaceful use of science as the only way to free mankind from the martyrdom of poverty and underdevelopment.

SÉRGIO MASCARENHAS, PhD, physicist from the University of São Paulo, Brazil, was Director of the Biophysics and Medical Physics College at ICTP since the start of these activities in 1981, by invitations of Professor Abdus Salam. He is also President and Confounder of the Third World Association of Medical Physics, Trieste, of which Abdus Salam was the Honorary Founding President. He is a member of the Third World Academy of Sciences, the Latin America Academy of Sciences, Fellow of the American Physics Society and former Fellow at the Institute of Advanced Study, Princeton (1996).