Prof. K. P. Gopinathan



Prof. Karumathil P Gopinathan was born (1939) in Ponnani, Malappuram District, Kerala, India. He obtained his BSc degree from Madras University and MSc from Kerala University. His Ph.D degree was from the Indian Institute of Science (IISc), Bangalore after which he worked as Post-Doctoral Fellow at the University of Illinois, Urbana and at Yale University, New Haven. Subsequently he had spent several years as Visiting Scientist/Professor at the Institute for Cancer Research, Philadelphia (USA), Edinburgh University (UK), University of Strasbourg (France) and the University of Washington, Seattle (USA). His major research contributions in those days pertained to identification of 'Nonsense Codons and Suppression' as well as the measurement of 'Absolute Fidelity in DNA replication' and 'Error Proneness' of viral reverse transcriptases. He was also intimately associated with the developments of recombinant DNA research, right from its formative days.

Dr Gopinathan joined IISc, Bangalore on his return to India and initiated research on genetics and molecular biology of Mycobacteria. In a landmark paper published in Current Science, Gopinathan was the first scientist to describe a genetic and biochemical basis for the development of resistance to the potent anti-tubercular drug isoniazid. He also contributed extensively to the protein synthesis mechanisms and Aminoacyl-tRNA synthetases from Mycobacteria. Later Gopinathan shifted his emphasis to the understanding of molecular mechanisms of differential gene expression as well as the developmental patterning in higher eukaryotes. He was the first scientist in India to initiate molecular biology research on the silkworms. His exploitations of the silkworms as a 'natural bioreactor' for large-scale synthesis of recombinant proteins as exemplified by generating the 'glowing silkworms' have attracted attention of the International and National media and television. Professor Gopinathan has published 150 research papers and guided more than thirty four Ph.D and MSc students and several post-doctoral Fellows. Professor Gopinathan was the Founder Chairman at the Centre for Genetic Engineering at IISc and then served as Chairman of the Microbiology and Cell Biology Department for nearly ten years. He also served as the Founder Director of the Monsanto Research Centre in India, established at the IISc campus. He was elected as President of the Indian Society for Cell Biology and has served as a member of several National and International Scientific Committees including Steering Committees of the WHO (Geneva). He has also served as Editorial Board Member of Indian Journal of Biochemistry & Biophysics, Journal of Genetics, etc.

Professor Gopinathan was awarded the UGC-JC Bose Award for Biological Sciences and the IISc Alumni Award for excellence in Scientific Research. He was the first recipient of the MR Das Memorial Oration Award of INSA (2005) and also conferred with the "Distinguished Biotechnologist" Award of the Indian Society for Biotechnology. He is a Fellow of INSA, New Delhi, Indian Academy of Sciences, Bangalore and National Academy of Sciences (India), Allahabad.