

## Jyotirmoy Das

### An obituary

Jyotirmoy Das, Director, Indian Institute of Chemical Biology, Calcutta, was one of the architects of modern biology and biotechnology in India. He suddenly passed away on 26 July 1998 after a brief illness and respiratory failure.

For those of us who knew Jyotirmoy intimately for many years his sudden demise came as a great shock and as an irreplaceable personal loss. He was an extraordinarily dynamic person whose commitment towards research and science was total. His ultimate passion was always to be personally in the frontier of international biotechnological research. This was not easy, particularly when one was also running a major National laboratory. Given the bureaucracy and inflexibility of the system, 'doing science seriously' and 'managing science well' simultaneously are often conflicting demands that can take heavy toll on a scientist in many ways. Jyotirmoy set his own standards for both the activities and never compromised on either front. We could only admire him for his enthusiasm, determination and accomplishments.

Born in 1939, in an educated middle class family of old Calcutta, Jyotirmoy was in many ways the archetypical Bengalee youth of those days with a streak of idealism, respect for a scholarly life and love for poetry and Rabindra sangeet. Tagore and Elliot were his life-long favourites. With a brilliant academic record, he inevitably went for engineering but promptly returned to basic sciences and obtained his Master's degree in physics from Calcutta University in 1960. His first taste of biology was as a PhD candidate working at the Calcutta School of Tropical Medicine where he did extensive work on electron microscopy of *Vibrio cholerae*, an organism that fascinated him throughout his life. He became a hard-core molecular biologist abroad. He contributed significantly on replication of mycoplasma viruses first as a Fellow

and then as an Assistant Professor in the Department of Microbiology in the University of Rochester. His long stay in the United States ended in 1977. After a brief period in the Faculty of Bose Institute, he joined IICB as Head of the Biophysics Division in 1979. Thereafter his original and innovative research work both on the molecular biology of *Vibrio cholerae* and in theoretical biology quickly distinguished him as a scientist of great talent and remarkable drive. He became the Director of IICB in December 1995.



His major research interest was elucidation of the molecular basis of pathogenicity of *V. cholerae*. He was one of the scientists at the forefront to establish recombinant DNA technology in this country during the late seventies. Once again, in the nineties he initiated pioneering work on the newly emerging areas of bacterial genome mapping and comparative genomics with *V. cholerae* as the model organism. Continuing with his work on *V. cholerae* genetics, he showed

remarkable originality, freshness of mind and with his love for abstract thinking, developed a totally diverse project on theoretical biology and mathematical modelling. He proposed a new theory of self-organization in non-ideal biochemical systems and made significant contributions to the analysis of fractal patterns in macromolecular sequences.

Das was a Fellow of the Indian National Science Academy, the Indian Academy of Sciences, Bangalore and the National Academy of Science, Allahabad. His outstanding scientific contributions were honoured by a large number of prestigious awards that included Ranbaxy Research Foundation Award, Om Prakash Vasin Award and INSA Golden Jubilee Commemoration Medal to be given posthumously. He also served in an advisory capacity in many scientific bodies, funding agencies and research institutes. In particular, he was very closely involved with the growth of the Department of Biotechnology from the very beginning.

Jyotirmoy had a colourful and multifaceted personality. We shall all remember with affection and respect his untiring and ceaseless effort to raise the quality of biological research in India. He is survived by his wife, Kalyani Das and daughter, Mousumi Das Chowdhury and a large number of students, colleagues and admirers. The scientific community in India mourns his untimely demise with a sense of deep and irreparable loss.

A. N. BHADURI  
D. P. BURMA\*

*Indian Institute of Chemical Biology,  
4 Raja S.C. Mullick Road, Jadavpur,  
Calcutta 700 032, India*

*\*Formerly Benaras Hindu University,  
Varanasi, India*