

Muttaiya and Indrani Sundaralingam, 1931 & 1941 - 2004



Muttaiya Sundaralingam, 73, and his wife Indrani, 63, died together the morning of December 26, 2004 when their hotel on the beach in Nilaveli, a small village just north of Trincomalee, Sri Lanka was struck by the tsunami. The Sundaralingams were

vacationing with their daughter Sharmini Shanker, and her husband, Shiva Shanker, along with their 3 children, ages 2-7. The Shanker family were not injured in the disaster because they happened to be staying at a hotel in Colombo at the time.

Muttaiya Sundaralingam, known as Sunda, was born in Taiping, Malaysia on September 21, 1931. He attended Kokuvil Hindu College (1949-1951) and the University of Ceylon-Colombo (1952-1956). In 1959, at the age of 26, he came to the United States, and three years later obtained a Ph.D. in Chemistry in the field of Crystallography with G. A. Jeffrey, University of Pittsburgh. After a postdoctoral period with Lyle H. Jensen at the University of Washington, he was appointed Research Instructor in the Department of Biological Structure there. He subsequently held positions at Harvard University, Case Western Reserve University, and Oxford University, and from 1969 to 1990, served as the Director of Biological Crystallography in the Department of Biochemistry at the University of Wisconsin-Madison. Sundaralingam joined Ohio State University in 1990 where he was named Ohio Regents Eminent Scholar and Professor in the departments of chemistry and biochemistry and Director of the Biological Macromolecular Structure Center.

Sunda had recently retired, but continued his research interests as an Emeritus Professor.

Indrani Sundaralingam, also known as Indra, was born in Trincomalee, Sri Lanka on November 2, 1941. She attended St. Mary's School in Trincomalee and then Madras University. In 1966, Indra came to the United States to marry Sunda.

Sunda had an abiding interest in the stereochemistry of nucleotides and nucleic acids, the blueprint of life. This had implications for the structural principles governing the folding of nucleic acids, about which little was known at the time of his research. Based on crystallographic studies of nucleotides and

molecular modeling, Professor Sundaralingam and his many students built a unified view of the structural principles dictating nucleic acid conformations. He identified the critical role played by the sugar moiety in determining the conformation of the nucleotide repeating unit and, ultimately, the sugar-phosphate backbone of nucleic acids. The principles developed have been borne out in practice time and again in subsequent work done in his laboratory and by scores of other scientists worldwide. His work is so often cited in the literature and in textbooks of biochemistry and biophysics that he was among the top 300 of the 1,000 most cited scientists for work published from 1965-1978. Among his honors are a John Simon Guggenheim Foundation Fellowship, Oxford, 1975-1976 and, in 1986, a University of Pittsburgh Alumni Distinguished Achievement Award.

Muttaiya and Indrani Sundaralingam are survived by their 3 children Sharmini, of Upper Arlington, Ohio; Rohan, of Chicago, Illinois; and Mohan, of Columbus, Ohio; and their grandchildren Nirvan, Kiran, and Sahaana Shanker. Sunda is survived by 7 brothers: Nadarajah (Singapore), Navaratnam (Malaysia), Ratnasabapathy (Malaysia), Gunaratnam (England), Darmarajah (Sri Lanka), Paramesvaran (Lancaster, CA), Kulasingam (Lancaster, CA) and one sister, Thilakavathy (Canada). Preceding him in death were another brother, Vernugopal, (New Jersey, 1933-2004) and a sister Saraswathy (Sri Lanka, 1935-1994). Indrani is survived by 5 brothers in Madison, Wisconsin: Ananda, Sivalingam, Manoga-ran, Baheetharan, Chandrakanthan and one sister, Sakunthalarani of Columbus, OH.

The Sundaralingam's sons, Mohan and Rohan, said: "Though the sudden and tragic loss of both of our parents by this massive, unforeseen force of nature is extremely painful for us, we can only be comforted by the thoughts that our parents perished together in the island that they knew as their homeland."

The Sundaralingams are also mourned by Sunda's many students, and by his many friends and colleagues in the crystallographic community.

Editor's note: We would be pleased to publish remembrances of the Sundaralingams and invite colleagues and former students to send them to us by May 1st, in time for the Summer Newsletter.

The photograph of Sunda and Indrani is from the Memorial Service in their honor, courtesy of Judith Gallucci, to whom it was given by Mohan Sundaralingam.