8

She was a star

Darshan Ranganathan
(by S Ranganathan)

Darshan Ranganathan was born on June 4, 1941 and passed away from metastasis of cancer on June 4, 2001, exactly at the age of sixty.

Darshan! I often said, "You are a star"!

She was more than that. She was a comet on the chemical horizon, shedding brilliance at prodigious costs of energy and vanishing at the apex of her career.

In describing Darshan's personality, I will begin with, what many may consider a hyperbole. With her expensive Canjeevram saris and the big red *bindi* on her forehead, she always appeared elegant to the extent that after one of her lectures at a symposium in Bangalore, a German professor commented that she reminded him of a picture of an Indian Goddess! We all laughed at that time but I think this statement in fact summarized everything about Darshan; her great warmth, quiet dignity, humility, equanimity and fortitude.

Summarizing Darshan's genius is difficult. At the time of her passing away, she was the most prolific organic chemist in India, having, in the last five years, a dozen publications in The Journal of the American Chemical Society, six in the Journal of Organic Chemistry and dozens in others. Her monumental contribution to the Accounts of Chemical Research was published, as

well as many other papers, posthumously. She was elected Fellow of the Indian Academy of Sciences, Indian National Science Academy and the recipient of many honors the last of which was The Third World Academy of Sciences Award in chemistry for her outstanding contributions to bio-organic chemistry, particularly supramolecular assemblies, molecular design, chemical simulation of key biological processes, synthesis of functional hybrid peptides and synthesis of nanotubes, in 1999.

All these achievements assume special significance, particularly for young women aspiring scientists in India, when viewed from the fact that at every turn in her life she felt the impact of male chauvinism that so controls the scientific world. She fended them all with the invincible armour of obsession for scientific research. When she came to Kanpur, where I was a member of the faculty, the unwritten rules that exist even today, did not permit her to be offered a position. Therefore, throughout her long stay in Kanpur, she had to hop from fellowship to fellowship and for some periods none at all! We count on small mercies and both of us were truly grateful to IITK and the chemistry department for permitting her to do research.

I knew from the beginning that she was better than me and was proud to share my funds and students with her so that she could work on her own problems and publish on her own. That was all she wanted, brushed away all other irritations and slowly blossomed into an organic chemist who won international peer recognition, even before she accepted an independent position at RRL, Trivandrum in 1993 and subsequently moved to IICT, Hyderabad in 1998.

Darshan was born to Shanti Swarup and Vidyavati Markan in 1941. I have heard, although she has vehemently denied it, that when young, she was quite a naughty girl with love for singing, drawing and dancing, the latter she performed once on the teacher's table! Darshan received her early education in Delhi and secured her Ph.D. from Delhi University under the guidance of Professor T.R. Seshadri. During this period she was a lecturer in chemistry at Miranda College, Delhi and rose to the rank of the Head of the Chemistry Department. Her academic record was truly out-

standing. As a coveted awardee of Senior Research Scholarship of the Royal Commission for the Exhibition of 1851, she carried out outstanding postdoctoral work in the group of Professor D. H. R. Barton. She returned in 1969, married in 1970 and started her independent research at the Indian Institute of Technology, Kanpur, the very same year.

Her perception of problems were truly uncanny. Some of Darshan's most notable work was on supramolecular chemistry. She became a wizard in conjuring supramolecules at various shapes. These important biomolecules made by aggrandization of smaller units play an important role in Nature. Her contribution to chemical education was monumental. She co-authored several books and a generation of young organic chemists grew up with "Current organic chemistry highlights", edited by Darshan and myself (those days, I typed on a stencil and she drew the structures beautifully). Our life was in perfect resonance; both of us worked unbelievably long hours and each of us were mostly engrossed in our own research areas.

For such a wonderful human being, that the end should come early and painfully is indeed a cruel twist of irony. Her breast cancer was detected in 1997 and she went through all the treatments including mastectomy and radiation. She had regular checkups. But the vicious infliction returned and in spite of all possible treatments, proved futile. She fought the long suffering just as bravely. She passed away the very day she was born sixty years ago and to the very day and time to the minute we were married 31 years ago!

What Darshan faced at Kanpur to pursue her research would continue for a long time and one could win this battle only with determination. A very useful strategy for aspiring women scientists in India, is to adopt the approach taken by Darshan, who realized that women scientists will face additional impediments and planned her career taking note of this rather than worrying about it. She set an example to emulate. Till the very end of her life she worked very hard. Her courage and will to fight with no acrimony and with a smile and verve were really special.

As a small tribute to Darshan's fierce profile, The Indian

National Science Academy kindly agreed to institute a biennial lecture in her memory to an outstanding woman scientist regardless of the domain of research. This is a first for the Academy to offer encouragement to women scientists, which has been overdue.