OBITUARY



Prof. Hema Ramachandran (12/Jan/1962 - 24/Nov/2020)

Prof Hema Ramachandran breathed her last in the early hours of 24th November 2020 at the age of 58, after a prolonged illness. She is survived by her husband, Mr Ramachandran.

Hema's scientific career began in 1984 in the Bhabha Atomic Research Centre (BARC), Trombay, where she specialized in High Pressure Crystallography, wherein her highly cited works on pressure-induced amorphous phases was honored by the INSA Young Scientist Award. Requiring to change her location following matrimony, she shifted to BARC Seismological Array, Gauribidanur (1991) to follow seismological studies related to modeling of earthquakes. In July 1995, she joined the Raman Research Institute as a faculty and initiated the Optics programme. Her research programme dealt with light propagation in random media with or without amplification. In 1998, she ventured into atomic physics by beginning the Cold Atoms programme at the Raman Research Institute. Her early efforts in setting up the Optics and Atomic Physics groups, and her persistent actions towards the advancement of the same, have now culminated into a flourishing Light and Matter Physics Group at the RRI, which enjoys prominence all over the world. The two lines of research remained her passion till her untimely demise.

Hema was 'one of the toppers among peers' all her life, beginning right from her early scholastic years, through her days at the IIT Bombay (1981-83), BARC Training School (27th batch, 1983), upto her later research years. Her love for lab work impelled her to return to the lab even in late hours after weary and inundating administrative duties. Her research accomplishments in pressure-induced amorphization, random lasers, quantum walks of light etc are highly regarded by international experts. Above all, her seminal contributions in imaging through turbid media, such as fog or tissues, continue to make a significant impact in imaging research. Apart from Science, she was also noted for Science Administration, which found her chairing high-profile governmental committees such as, for instance, Programme Advisory Committees or the BRICS Working Groups.

On the personal side, Hema was a warm, gentle, and an accommodating person. Those of us who were close to her knew that her reserved exterior masked a joyful, playful and a childlike fun-loving disposition. Her sincere, focused and hardworking attitude was inspiring. Everyone who walked into her office, ranging from international experts to college students, was made to feel welcome and respected. In public gatherings, her civility and respect to decorum stood

out. It is no wonder, therefore, that she served as an inspirational role model for young researchers, especially women.

The last few years of her life saw Hema put up a massive struggle against cancer and its aftereffects. Under circumstances in which many a strong individual would have buckled, she exhibited tremendous resilience and character in returning to work after every episode of illness. Her stoicism in negotiating through the vicissitudes of health had earned her an iconic identity in the Indian physics populace. Her unmatched positivity arose from two adages she lived by; the first one is " Be not sad a rose bush has thorns; be glad a thorn bush has roses", and the other goes "It is darkest before dawn".

Sadly, the dawn of 24 November 2020 was darker.

Sushil Mujumdar, Hema's first student. December 3, 2020.