OBITUARY

**P.V. Sanker Narayan
(1923 – 2017)**

Dr. P.V. Sanker Narayan, an eminent Geophysicist passed away on 3rd March, 2017 at Chennai. While he was recovering from a surgery of hip injury, a sudden cardiac arrest resulted in his sad demise. He was 93 years old. His wife Mrs. Gowri, a graduate in music from Kalakshetra and an accomplished 'A' class artist at AIR Chennai, predeceased him. He is survived by his daughter Sathya, son-in-law Mr. Dhillip and granddaughter Ms. Akansha Dhillip and a host of his students, associates and admirers to mourn.

Born on August 5, 1923, Sanker Narayan had his schooling in Brennen's school in Thalassery, Kerala. After obtaining bachelor's degree from Madras University in 1943, he started his career in the India Meteorological Department (IMD), at Bombay and Poona. Because of his passion for Astrophysics and Geophysics, he shifted to the Astrophysical Observatory, Kodaikanal in 1948 and worked there till 1956, when he left for USA for higher studies. In USA, he obtained MS degree in Physics in 1958 and PhD in Geophysics and Geology in 1961, both from the University of Wisconsin, Madison, USA, under the guidance of Prof. G.P. Woollard. He served as an Assistant Professor on the Geophysics faculty in the same university till his return to India in 1962. As part of his research programme he carried out the regional aeromagnetic survey of the entire state of Wisconsin.

On his return to India in 1962, he joined the then newly established National Geophysical Research Institute (NGRI), under the Council of Scientific & Industrial and Research (CSIR) in Hyderabad as one of the first few scientists chosen to formulate, lead and guide the R&D programmes in the Institute. During the next two decades, till his superannuation, he served the Institute in different capacities contributing immensely, in establishing and developing very important and major research groups in the fields of Geomagnetism and Geoelectricity, Magnetotellurics and Airborne Geophysics. In 1966, the "Multi-parameter Airborne Geophysical Survey System" was developed at NGRI, as a national facility, and beginning from April 1967, under his leadership a large number of Airborne Geophysical surveys were carried out in the country for mineral and oil explorations as well as for regional geological mapping.

The Hyderabad Magnetic Observatory, a key low latitude observatory, established in the NGRI campus under his leadership, has continuously recorded and reported variations of magnetic activity since 1964 and it was accorded INTERMAGNET status in 2009. Another major achievement he had accomplished is building a magnetic and telluric pulsation observatory at Choutuppal in collaboration with USSR—an important observatory in the Equatorial zone, meant for observation and study of pulsations to help understanding the earth's ionospheric and magnetospheric processes. His efforts in this direction also led to the establishment of yet another unique pulsation observatory at Etiyapuram in Tamil Nadu, this being the only pulsation observatory in the world located right on the dip-equator, thus assuming a great significance in understanding the equatorial pulsation

phenomena and the influence of Equatorial Electrojet, besides aiding the study of magnetospheric processes.

During his tenure at NGRI he guided 5 research scholars in PhD's in the fields of Gravity & Magnetism, Magnetic and Telluric pulsation studies, Geomagnetism, Magneto-Telluric Sounding for Deep Crustal Studies and Airborne Geophysics.

On his retirement from NGRI, as Deputy Director, in 1983, he settled down in Chennai where he started investigating the possible influence/interaction of extremely low frequency and ultra low intensity magnetic fields with the living organisms. During the period 1981-1984, the Department of Science and Technology, Government of India supported him, with financial assistance, in conducting a series of experiments at the Voluntary Health Services Medical complex at Adyar for studying the effects of Pulsed Magnetic Fields (PMF) of extremely low frequency and ultra low intensity on test animals and human volunteers. These milestone experimental results paved the way for the formation of the Madras Institute of Magnetobiology in 1984 as a scientific society under the Tamil Nadu Societies Registration Act, 1975, with Dr. Sanker Narayan as its founder. He represented India at the International conference of the ABAEM, Venice, Italy in 1984 where he presented a paper on the effects of extremely low frequency magnetic pulsation on human subjects. Presently, this institute of Magnetobiology is perhaps the only one of its kind in South-East Asia and is considered as a pioneer organization in Magnetobiology. He continued as its Hon. Director till he breathed last.

He was the recipient of (i) Decennial Award of the Indian Geophysical Union in 1980, (ii) M.K. Nambiar Memorial Oration Award of the Indian Association of Biomedical Scientists in 1983 for contribution to the emerging hybrid discipline of Magnetobiology and (iii) Vummidi Bangaru Jewellers Award in 1992 for contributions to the discipline of Magnetobiology and Biomagnetism. He authored 2 Books, 184 Research papers & reports and 20 general articles. The text book of "Magnetobiology and Biomagnetism" published in 2009, is the only reference textbook from South-East Asia on the subject of Magnetobiology. He authored yet another book titled "Geomagnetism and Life Processes" published by Madras Science Foundation with support from Dept. of Science and Technology, New Delhi in 1989.

Dr. Sanker Narayan, a distinguished scientist, dignified and honest person to the core and with a very pleasant temperament, was a kind hearted human being and an engaging conversationalist. He lived a full and contented life, inspiring all those who came in contact with him, and was a special person of significance in the lives of some of us, who were his students and close associates.

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