

V.V.S. Sarma (May 1944- Jan 2018)

Professor Vallury Subrahmanya Sarma, an extraordinary teacher and researcher, passed away on 13th January 2018 at his home in Bangalore. He is survived by his wife Mrs Subbalaxmi and three daughters Vijaya, Janaki and Aruna.

Professor V.V.S. Sarma was born on May 7, 1944 in Vijayawada. After graduation with a University gold medal in Mathematics, Physics and Chemistry (called MPC) from Andhra University in 1961, he obtained his BE, ME and PhD degrees from IISc, Bangalore. He served the IISc as faculty in various capacities from 1967. He became a full professor in 1983, and continued his service until his retirement in 2006. He was a visiting Professor at the University of Southwestern Louisiana, USA between 1984-86 and at Tata Research Development and Design Centre, Pune between 1995-97. He was elected to the fellowships of Indian Academy of Science, Indian National Science Academy and Indian National Academy of Engineering. Post retirement, he was an Honorary Professor in CSA and an INAE Distinguished Professor.

Professor V.V.S. Sarma fondly called VVS by his students and friends, spent most of his academic career at the Indian Institute of Science (IISc), Bangalore. Over nearly four decades, he has initiated research at IISc in the then emerging areas of reliability engineering, pattern recognition, artificial Intelligence and machine learning, which are areas of utmost importance in the industry today. His survey paper in a special issue on AI in management with some new material in IEEE Transactions on Knowledge and Data Engineering entitled “Knowledge-based approaches for scheduling problems: A survey” was widely cited. He has guided a generation of researchers in these areas. His students were drawn from CSA, ECE, Aerospace, Mathematics and Metallurgy departments and engineers from organizations such as IAF, NAL, ISRO, DRDO, BHEL under the external registration program. Many of his students are currently senior professors in universities or senior engineering researchers in Defense and ISRO across India, USA and Canada. With his friends N.Viswanadham and M.G. Singh, he has written a book **Reliability of Computer and Control Systems** published by North-Holland Systems and Control series in 1987. He co-edited the book “**Artificial Intelligence and Expert Systems in Indian Context,**” published by Tata-McGraw-Hill, 1990 jointly with N.Viswanadham, B.L.Deekshatulu, and B. Yegnanarayana.

Prof. VVS Sarma was a very inspiring teacher. He used to enthuse and motivate his students to learn many topics of current research. As early as 1976, when the field was still in its infancy, he taught a course on Artificial Intelligence at IISc. He was a very gentle person and used to be affectionate towards all his students.

During 2006-2012 Prof VVS Sarma served Honorary professor and INAE distinguished professor respectively. He was studying his favorite subject of interface between intelligent systems in engineering and Indian Philosophy. He had greater appreciation of the four Darsanas: Samkhya, Yoga, Nyaya, Vaiseshika and some familiarity with Mimamsa and Vedanta. For exploring the limits of AI and smart systems on the one hand and for exploring the function of human mind in terms of thinking, memory, discrimination (*viveka*, विवेक), knowledge, ignorance (अविद्या), consciousness, self, Atman and Brahman (described as *satyam jñānam anantam brahma*, सत्यं ज्ञानं अनंतं ब्रह्म). He believed that Indian philosophy has the potential of clarifying the scope of AI and its boundaries. He was very active researcher and writer during this period on various topics connecting Engineering and Indian Philosophy

He has researched, edited, translated and rearranged the books **Structure of the Universe (Vedic)**, **Sri Krishna** and **Hindu Vivaha Vyavashta** by Bhramasri K. Sivananda Murty, from Telugu to English. He was a regular contributor of Articles in Telugu and English to popular magazines **Supatha**, **Narahari Vani** and **Chaitanyam**.

In the passing away of Prof. VVS Sarma the research community has lost a mentor, an influential researcher and an outstanding teacher. All his students lost a father figure whom they will continue to look up to.