

Bio data of **A. Sen Gupta**

Dr Amitava Sen Gupta received the M. Sc. and Ph.D. degrees in Physics from the University of Delhi, India, in 1974 and 1980, respectively. His Ph.D. work involved experimental and theoretical studies of traveling ionospheric disturbances using satellites. In 1979, he joined the Time Standards section of the National Physical Laboratory, New Delhi. He superannuated from NPL in March 2015 as its Acting Director, holding a position of Outstanding Scientist.

He has expertise in the areas of Radio and Atmospheric Physics; Electronics; Atomic Physics; and Time and Frequency Standards. With over 40 years of research experience, his major contributions include design and development of India's first and one of the world's most accurate primary atomic clocks, known as the 'Cesium Fountain' and the development of the prototype of a space qualified Rubidium Clock for ISRO. He has recently initiated research and development on single trapped Yb ion based optical frequency standards at NPL, New Delhi. He is also credited with the development of India's first satellite based standard time broadcasts using the domestic INSAT satellites in the 1990s.

Dr Sen Gupta was a member of the first and second Indian Antarctic Expeditions in 1981-82, where he performed experiments related to upper atmospheric radio propagation and Ozone studies. Subsequently, he was the leader of a 100 member team of the Eighth Indian Antarctic Expedition in 1988-89 setting up the permanent Indian Antarctic station 'Maitri'.

Dr. Sen Gupta is a Fellow of the National Academy of Sciences, India, Fellow of the Institution of Electronic and Telecom Engineers (IETE), India, Fellow and former President of the Metrology Society of India, General Secretary of the Indian Radio Science Society and a Senior Member of the IEEE, USA. He was awarded the prestigious O. P. Bhasin Foundation award for Science and Technology for the year 2002 for outstanding contributions in the field of Electronics and Information Technology.