The Western New York chapter of the IEEE Geoscience and Remote Sensing Society and the Center for Electronic Imaging Systems at the University of Rochester jointly present a technical seminar

Touching Humanity through Space Technology: Indian Perspectives

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Thursday, March 12, 2009
Refreshments at 6:30 pm
Meeting and Presentation at 7 pm

Seminar Room
Laboratory for Laser Energetics, University of Rochester
250 E. River Road, Rochester, New York
Venue Map: http://ewh.ieee.org/r1/rochester/grss/coimap.pdf

Abstract

Global space technology developments since the launch of first artificial satellite in 1957 have often been focused on space exploration and understanding the nature of our universe beyond Earth. These explorations have sparked the advance of new technologies in many fields including communications and computing but they have also given humanity a new perspective on our own planet. The Indian space program, beginning in the 1960's, has been a pioneer in focusing this technology to benefit man and society. Over the years, India has established two operational space systems: 1) the Indian Remote Sensing Satellite (IRS) System for natural resource monitoring and management; and 2) the Indian National Satellite (INSAT) System providing services for telecommunications, television broadcasting and meteorology including disaster warning support.

The seven IRS satellites serve as mainstays of the Indian National Natural Resources Management System (NNRMS) as well as to provide data to worldwide users. Vital applications such as identifying zones which could yield ground water, suitable locations for recharging water, monitoring command areas, estimating crop areas and yields, assessing deforestation, mapping urban areas for planning purposes, delineating ocean areas with higher fish catch potential and monitoring of environment are being pursued actively by users with the spacebased data.

The ten satellite INSAT system is one of the largest domestic communication satellite systems in the Asia Pacific region and contributes significantly to a variety of services in telecommunications and television broadcasting including meteorological observations, disaster communications, tele-education, tele-health services and village resource centers. A strong bond with academic institutions exists through extensive research partnership. This end-to-end capability in space for vital application in communications, broadcasting, meteorology and natural resource Information, which are of direct relevance for national development, has secured for India a unique place in the international community. Thus, the last four decades have seen the fruition of the vision of Dr. Vikram Sarabhai, and the coming days will see further consolidation of the gains to build a space system which will be consistent with the India's rising status as a global power.

Biography

Dr. Y.V.N. Krishna Murthy is Scientist-G & Director of Regional Remote Sensing Service Centers of the Indian Space Research Organisation (ISRO), Dept. of Space, Govt. of India, Bangalore. As Director, he leads a team of geospatial technologists and scientists across five centers in executing national and regional projects using space technology. He obtained his M.Sc from Andhra University, Visakhapatnam in 1979 with distinction and Ph.D. from College of Engineering, Andhra University in 1986. He is the recipient of Hari-Om Ashram Vikram Sarabhai Research award in space applications for the year 2003.