## INDIAN SOCIETY OF GEOMATICS

## NATIONAL GEOMATICS AWARD – APPLICATIONS FOR THE YEAR 2008

## **CITATION**



Maj. Gen. (Dr) B. Nagarajan, born on May 28, 1953, received his B.E. (Civil) degree in 1975 and Doctorate in 1994 from Department of Geodesy and Surveying, The Ohio State University, Columbus, USA. His topic of research covered Gravimetric Geodesy, Geodynamics and Earth Rotation, Satellite Geodesy with special emphasis on GPS, Satellite Laser Ranging and Very Long Basic Range Interferometry (VLBI).

He has been involved in the field of Geomatic Engineering since 1986. He is the pioneer in the field of developing Cadastre based land Information System in 1986 when the concept of LIS/GIS was trickling down for development to the surveying community

From August 2001 onwards he has been serving as the Director, Geodetic and Research Branch of Survey of India and has initiated path breaking initiatives that can create greater impact in the field of Geomatics. Some of the projects undertaken by the officer include:

He has been involved in the 'Redefinition of Indian Geodetic datums - Horizontal and Vertical'. He has been the architect in the generation of a new geocentric coordinate system, which should replace the 175 years old locally best fitting Everest coordinate system, in the field of topographical mapping.

A new initiative to redefine the Indian vertical datum based on geopotential numbers has also been taken up by him since 2006. As a greatest achievement, any country can be proud of, more than 46,000 linear kilometers of high precision levelling along with gravity observations has been completed in a span of just 2 years.

He has been involved in the 'Modernization of Tide Gauge network for early Tsunami warning studies' after the December 26, 2004 Greater Sumatra earthquake and the resultant Tsunami. With his efforts, today the real time data from the 16 ports along the Indian coast and from the islands of Andaman Nicobar and Lakshwadeep are flowing to the National Early Tsunami Warning Center established at INCOIS, Hyderabad..

He has also developed high resolution good model to facilitate GPS leveling, The model once completed will facilitate converting the GPS based ellipsoidal heights to mean sea level heights for engineering applications to an accuracy of  $\pm 1.5$  to 10 cm.

In addition to the above productive work Maj Gen (Dr) B. Nagarajan has contributed extensively in the field of academics and research also. He has also presented many papers and chaired technical sessions in various International and National Geomatics conferences. He has also guided MTech and PhD students in their dissertation work

In recognizing his outstanding contributions in the field of Gravimetric Geodesy, Geodynamics, Satellite Geodesy with special emphasis on GPS, SLR and VLBI, <u>Indian Society of Geomatics confers the 'National Geomatics Award – Technology'</u> for the year **2008** on 'Maj. Gen. (Dr.) B. <u>Nagarajan'</u>.

(S.K. Pathan) Secretary (R.R. Navalgund) President