

Geomatics: Technology and Applications – Sandhya Misra, Birbal Sahni Institute of Palaeobotany, Lucknow - 226 007 (Email: sandhyabsip@gmail.com)

A training programme for women scientists on Geomatics: Technology and Applications, coordinated by Prof. Anjana Vyas, (Centre for Geospatial Science, Technology and Space Research, Faculty of Geomatics and Space Applications) was organised at CEPT University, University Road, Navragpura, Ahmedabad during 3rd to 8th December, 2012 was sponsored by Department of Science and Technology (DST), New Delhi, India. This training programme was initiated with an objective to impart training on Geographical Information System (GIS); Spatial data Analysis (Vector and Raster), Non-Spatial data Analysis, Error Analysis; Formats and Interfaces of GIS; Remote Sensing (RS); Integration of RS and GIS; Modelling, RS and GIS Applications and thus enhancing the knowledge base among the women with science background as trainee, researchers, officials in the government departments, non-governmental organizations and private/ corporate sectors. A total of 22 women participants from diversified geographical regions of India with diversified educational and work backgrounds were selected for this programme. Beneficiaries of this programme ranged from educational (PhD research scholars, Universities teachers), research (DST women scientists) to managerial class (Urban Plan managers and NGO's workers) of society. The whole training programme was scheduled with lectures and hands on sessions. In this connection delegates from various reputed agencies viz., ISRO, BISAC, NRSC, IIRS, CGARD, CEPT University etc working in the field of

Remote sensing and Geomatics were invited to give training to the participants in their respective field of interest and expertise.

The course was inaugurated on 3rd December by H.B. Singh from the Department of Science and Technology, India. In his inaugural speech he stressed upon the need of GIS and remote sensing in quality research. He encouraged participants to actively participate in the development of science and technology and listed various schemes of the government for the women scientist at various levels and stages of their education. His inaugural speech was preceded by a lecture on Research Methodology by V.K. Bhasin (University of Delhi). He introduced the participants about various methods of writing effective and qualitative research publication. Dr. Ramakrishna from ISRO, Ahmedabad gave a brief description on Indian space programmes DIP and GIS. Hermon from CGARD, NIRD Hyderabad presented a brief outline to GIS software like Arc GIS, Quantum GIS, ILWIS, Mapping, ERDAS, AutoCAD map. Then under the supervision of Simit Raval from Australia, a theoretical knowledge base how remote sensing is used in mining exploration and mining environment. Second day (4th December) started with the lecture of course coordinator Anjana Vyas. She explained various applications of GIS for urban infrastructure and services. She quoted the examples of few of the infrastructures and urban planning done in Ahmedabad on the basis of GIS and remote sensing. Her lecture was succeeded by the interesting and interactive lecture by Ramni on cartography

(making maps) and on the theoretical concepts of Georeferencing. I.C. Mateida introduced the basis of database management system. On third day (5th December) modelling urban water supply using GIS environment was dealt by A.K. Singh. An introduction to python (a programming language) was given by Guneshwar Anand. On the fourth day (6th December) a brief introduction to data quality and policies; OGC, NSDI and GSDI initiatives was taken by P.L. Raju while S.S. Palsule explained various topics like sensors and DIP techniques, creating and editing vector files and tables and query and symbology. On the fifth day (7th December) participants were taken outside in a terrain region for the GPS reading activity, and for a trip to Indian Space Research Organisation (ISRO) and Bhaskaracharya Institute of Space Applications and Geo-informatics (BISAG). H.B. Pandya at ISRO introduced the participants with the working grounds of all the 16 centres of ISRO. In his talk about the use of Telemedicine, tele-education, Distress Alert Transmitter (DAT) while at BISAG the director, P.P. Singh in his interactive lecture told about how the GIS and remote sensing have become a handy tool in planning, decision making and visualisation by giving excellent examples from Gujarat and in the evening participants were taken for a dinner at Vishala where participants come across about the various traditional culture and food of Gujarat state. The programme ended with the valedictory session on 8th December where individual participant's feedback was taken.