Department of Science and Technology, New Delhi sponsored Training on

'Geomatics: Technology and Applications'

for Women Scientists

October 21-26, 2013

Introduction:

Geomatics, as known as geospatial technology also geomatics engineering is a discipline of analyzing geographic information which is spatially referenced. Geomatics is a scientific term, relatively new. It consists of tools and techniques. By the end of year 1970, the geomatics had emerged in recognition of common technological requirements and of opportunity to build the system that could satisfy the multiple applications. The technology is advancing so as the modern Geomatics which has utility of maps by replacing it with a large number of coverage's, each with interrelated themes are combined to give meaningful answers for decision-makers. Geomatics is giving the broad dimension from map to the spatial decision support system.

A multidisciplinary approach is essential to analyse spatial and non spatial parameters together for decision making at local and global level. Spatial information represented in the form of thematic maps in relation with the respective attribute data, the system called, Geographical Information System (GIS), has been more popular in the last decade in government and private sectors. The decision support system has capabilities to take input of data from these sources and can analyses multiple parameters together for planning and management of available resources. The decision makers need various kinds of data sets to arrive at appropriate decisions, which is possible through use of these technologies. An integrated approach for decision making with scientific data base is more accurate and effective for management of natural and manmade resources. Availability of experts in the above mentioned areas is very sparse. The need for the training in this area is expected to increase.

Faculty of Technology, CEPT University offers Post Graduate Programme in Geomatics. This is multi-disciplinary in nature has multi dimensional approach, it emphasizes on teaching

geomatics to the students from multi-disciplinary background. Since the FT is engaged with teaching and research in Geomatics, having good experience and expertise in-house, FT through its Centre for Geospatial Science, Technology and Space Research offers short-term training programmes to enhance the knowledge base among the women with science background as trainee, researchers, officials in the government departments, non-governmental organizations and private/ corporate sectors representatives.

Training Components:

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; Modeling, RS and GIS Applications.

Objectives:

This short course will generate an interest amongst the participants to make use of the scientific technology in the real time application areas. Those would able to develop the technical understanding and skills in the use of Geomatics. The trainees would learn through theoretical as well as practical training and would able to establish a base for the use of the geomatics technologies in the research activities.

Importance of the Training:

Geomatics studies are necessary today for quick resource assessment and monitoring, change detection studies, evaluation of plans, maintaining all types of records related to resources, facilities, and database for researchers, planners, engineers, administrators, and academicians. It is also necessary because studies based on the geomatics technologies have logically proved more accurate and scientific, unbiased and multi-disciplinary, thus allowing the decision making process in any area to be more effective and efficient. In this regard the training programme is very important.

Training Outcome:

The training would take care of 4 components: 1) Skill Development 2) Process Learning 3) Self Learning and confidence gaining and 4) Sensitising Experience towards the use of technology. On completion of the training the participants are able to (a) demonstrate the knowledge and understanding of geospatial methods and techniques and (b) use appropriate methods and techniques for spatial and non-spatial data analysis to gain insight to the nature and dynamics of concerned research.

Eligibility Criteria:

All Women Scientists Scheme awardees of Department of Science and Technology, Research Scholars, Research Associates, Faculty Members of Universities and Colleges, and professionals from Central and State Government Organizations, NGOs and other Institutions.

Fees:

No fee will be charged for the Training.

Expenses on travel (excluding Local Travel); Lunch and refreshment during training hours and accommodation would be provided by the organizers as per the CEPT University Rules.

How to Apply:

Interested women scientists may download the application form from the website **www.dst.gov.in** or **www.cept.ac.in** which may also be obtained by sending a request to **cept.geomatics@gmail.com**. Completed applications form duly signed by the Head of the Institute should reach to Prof. (Dr.) Anjana Vyas, Course Coordinator, Centre for Geospatial Science, Technology and Space Research, Faculty of Technology, CEPT University, University Road, Navragpura, Ahmedabad-380009 before **September 25, 2013**.