

EIGHTH COURSE ON APPLICATION OF REMOTE SENSING AND GIS FOR MINERAL EXPLORATION

ANNOUNCEMENT

Geological Survey Of India (GSI) Training Institute, in collaboration with ISRO, proposes to conduct the 8th Course on Application of Remote Sensing and GIS for Mineral Exploration for 10 weeks from 19th January 2009 to 3rd April 2009 at Hyderabad. The course will cover five modules, viz.:

1. Fundamentals of Photogeology and Remote Sensing such as aerial photography, photogrammetry, physics of remote sensing, sensors and platforms, various remote sensing data products, formats and remote sensing in visible, thermal and microwave regions of the electromagnetic spectrum. Techniques of interpretation of aerial photos and satellite imagery.
2. Digital Image Processing and Digital Photogrammetry including loading of different satellite images and sub setting, geometric rectification of the spatial data, statistical analysis of digital data, various image enhancement (radiometric, spectral and spatial) techniques, multi-band enhancement techniques – including band ratioing, principal component analysis, RGB–HIS transformation, resolution merge, image fusion, Image classification techniques, mosaicking and map composition. Ortho-rectification, generation of digital elevation model (DEM), 3 D visualization and feature extraction on DEM using both aerial photos (stereo-pair) and satellite data.
3. Geographic Information System covering general concepts of spatial data models, introduction to Arc GIS, Spatial data capture techniques, georeferencing and on screen digitization, automatic and semi-automatic vectorization using Arc Scan, spatial data editing, Concepts of GPS and mobile mapping, spatial adjustments, GIS analysis and modeling techniques, Cartographic principles and map layouts.
4. Case histories of application of Remote Sensing and GIS in mineral exploration.
5. Block interpretation and field checks.

The training will be imparted using state-of-the-art image processing and photogrammetry and GIS software.

The course is targeted for geoscientists of State/Central Govt organizations, State Remote Sensing Centres, and Faculty of Universities. The candidates should be postgraduate in Geology/Geography/Geophysics/Geoinformatics or equivalent degree in the relevant field. **Participants who are familiar with using Remote Sensing and GIS techniques will be preferred. There is no course fee. Limited fellowships are available. Modest hostel facility is available in the GSI campus.**

Interested candidates may send in their application with the following details: (1) Name of the sponsoring organization, (2) Name, (3) Designation, (4) Sex, (5) Date of birth, (6) Academic qualification, (7) Area of specialization and professional experience, (8) Relevance of training to the present job, (9) Computer background, (10) Address for communication including e-mail ID, phone number and fax number.

Consent letter: This is to recommend and forward the application of Dr/Shri/Ms _____ of this Department for the eighth course on 'Application of Remote Sensing and GIS for Mineral Exploration' to be conducted by GSI Training Institute, under NNRMS programme sponsored by Indian Space Research Organization from 19th January to 3rd April 2009.

Place:

Date:

(Signature of Sponsoring Authority)

The completed applications may be sent to the Dy. Director General, GSITI, GSI Complex, Bandlaguda, Hyderabad 500 068 by **25 November 2008**. Attention: Director, PGRS Division (Ph-040-24220944, 24220681, Fax: 040-24220680, e-mail: ddggsiti@gmail.com). For more details please visit the GSI website: www.gsi.gov.in