

**Short Term Training Program (STTP) on
"Microwave Remote Sensing and its
Application"
Under TEQIP -II**

January 24th to 28th, 2017

REGISTRATION FORM

Name:

Designation:

Organization:

Qualification:

Correspondence Address:

.....

.....

Tel. (O) (R)

(M)

E-Mail:

Place:

Signature

Note:

- Last date for submitting this form is 10th January. Admission in the course is first come first serve basis.
- Selection in the course will be intimated by email on 12th January.

Patron
Prof. Sudarshan Tiwari
Director, NIT Raipur

Chairman
Dr. S. Sanyal
*Dean, Research and Consultancy,
NIT Raipur*

Convenor
Dr. P. Diwan
HOD, Department of Applied Geology, NIT Raipur

Coordinator
Dr. H. Govil
Department of Applied Geology, NIT Raipur
hgovil.geo@nitrr.ac.in
+91-9927337832

Co-Coordinator
Dr. Neeraj Vishwakarma
Dr. Vikal Kumar Singh
*Department of Applied Geology,
NIT Raipur*

Organizing Committee Members

Dr. D. C. Jhariya, NIT, Raipur
Mr. Gaurav Jangdey, NIT, Raipur
Mr. Subhranshu Pani, NIT, Raipur
Ms. Rubia, NIT, Raipur
Mr. Tarun Kumar, NIT, Raipur
Mrs. Shalini Choubey, NIT, Raipur
Mr. Sagar Mishra, NIT, Raipur
Miss. Monika, NIT, Raipur
Mr. Mahesh Tripathi, NIT, Raipur

Address for Correspondence
Dr. H. Govil
Department of Applied Geology
NIT, Raipur
hgovil.geo@nitrr.ac.in
+91-9927337832

**Short Term Training Program
on**

**"Microwave Remote Sensing and its
Application"
Under TEQIP -II**

January 24th to January 28th, 2017



Organized by

Department of Applied Geology



**National Institute of Technology
Raipur-492 010 (Chhattisgarh)**

About the Institute:

National Institute of Technology Raipur situated in the capital of Chhattisgarh, has proven to be 'avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our First President Hon'ble Dr. Rajendra Prasad on 14th September 1956, the Institute started with two Departments namely Metallurgical Engineering and Mining Engineering. Later the inauguration of the Institute building was done by our First Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the Institute was upgraded to National Institute of Technology. It is well connected with Mumbai, Delhi and all metro cities by regular flights and is on the main Howrah-Mumbai railway route. The Institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Department:

The Department has been successfully functioning for over six decades, preparing the post-graduates for the post of geologist / earth scientists to a number of Central, State, Public and Private organizations. The Department also provides an outstanding research environment and offers academic program leading to the award of Ph.D. Degree. Apart from this, Department takes care of B.Tech.(Mining Engg.), B.Tech. (Civil Engg.) and B.Tech. (Metallurgical Engg) and training them in basic fundamentals of geology branches.

About the Course

The advancement of earth observation science has opened new avenues of research in the field of earth sciences. With the technological advancements in geo-information sciences, remote sensing has become an effective method for detection and investigation of various factors. The visible and infra-red regions are known as optical regions, and the microwave region (1mm - 1m) is considered as non-optical region. Systems operating in optical region are being used for several decades and therefore, are more advanced and widely employed. Therefore, the use of microwave or radar remote sensing is preferred in such areas. Radar imaging through Synthetic Aperture Radar (SAR) systems has revolutionized and expanded the technology of Microwave remote sensing especially in geosciences applications using different techniques like SAR Polarimetry (PolSAR), SAR Interferometry (InSAR) and Polarimetric SAR Interferometry (PolInSAR).

Theme/Scope:

SAR systems in general helps in developing highly accurate and detailed elevation maps, flood and oil spill monitoring, land use and land cover change, soil moisture and biomass estimation, assessing the health of crops and forests and even in urban planning and development.

The lectures and demonstration in the Laboratory will be delivered by experts from NIT, IIRS, IIT Mumbai, SAC Ahmedabad and other reputed academic and research institutions

Topics to be covered (With practical):

- Introduction to SAR Technology
- Overview of SAR sensor and data
- SAR data Format and data processing
- SAR Image Interpretation
- Backscatter Image Generation
- RISAT-1 data Processing
- SAR Interferometry
- SAR Polarimetry
- Applications, Case studies and Tutorials

Targeted Participants:

- Post Graduate & Research Scholars
- Faculty Members
- Engineers, Scientists of various organizations

Registration Fee Details (in INR):

Participants	Amount (in Rs.)
Students	500
Faculty	1000
Industry /Research Organization	3000

Application in the prescribed format with registration fee in the form of NEFT/Demand Draft drawn in favor of “**Director, NIT Raipur**” must reach the Coordinator on or before 10th January 2017. No. of seats is limited to 25, short-listing will be done on first-cum-first serve basis and the candidate will be intimated through email. Certificates will be issued to the participants only after attending the complete course. No TA/DA will be paid to the participants.