

## Four Day Workshop on Introduction to SAR Data Processing and Applications

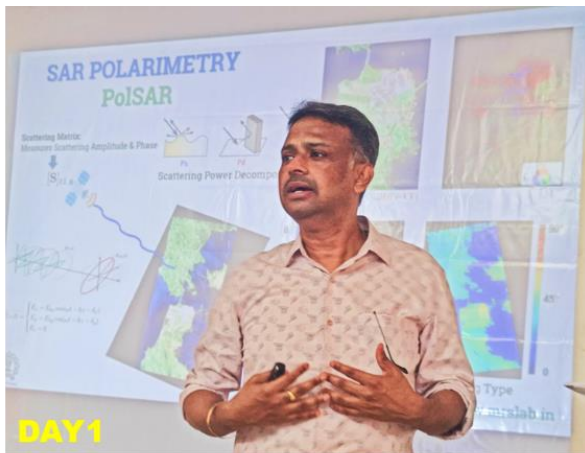


A four-day workshop from 17<sup>th</sup> to 20<sup>th</sup> April, 2023 on Introduction to SAR data processing and application has been organized by department of Geoinformatics, Central University of Jharkhand in collaboration with its former integrated MTech student Abhinav Verma and his mentor prof. Avik Bhattacharya from Indian Institute of Technology Bombay, Mumbai under the PMRF fellowship program. The workshop with the strength of 43 participants started with an inaugural session addressed by Prof. A.C. Pandey, dean school of natural resource management; Prof. Manoj Kumar, dean academics affairs and Prof. A.K. Padhy, dean R & D. The special guest of the workshop Prof. Avik Bhattacharya from Centre of Studies in Resources Engineering, Indian Institute of Technology Bombay (CSRE, IITB) delivered a lecture on the overview of the microwave remote sensing providing the insights of the SAR data and its application in different field of study. Overall, 16 technical sessions along with tutorials was carried out by Mr. Abhinav Verma with a thorough demonstration and theoretical knowledge about microwave datasets, its processing and analysis as well as its application in urban, agricultural, forestry and ocean-based studies using open-source software like SNAP, PolSARpro and Qgis. The motive of the workshop was to make the students and research scholar familiar with the upcoming techniques and datasets that can be utilized for their future research purposes.

The technical sessions and hands-on training were conducted as follows:

### DAY 1:

- Overview: Microwave Remote Sensing
- Open-source SAR data/processing software
- Understanding dual-pol SAR data and its processing – I
- Understanding dual-pol SAR data and its processing – II



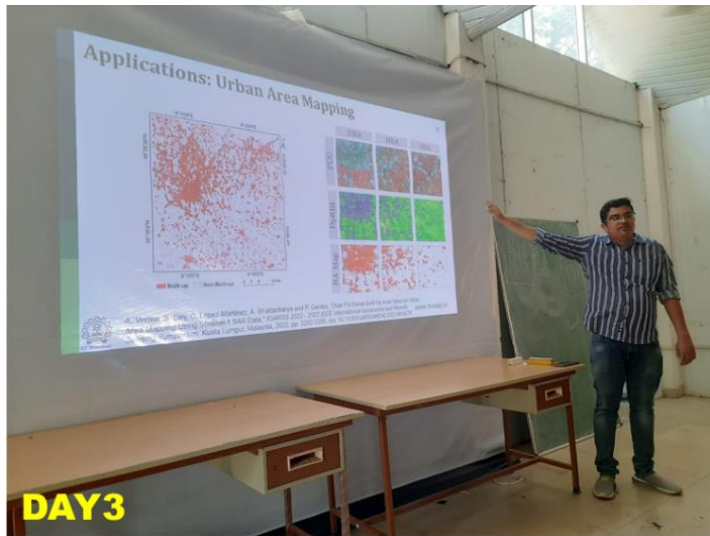
## DAY 2:

- Dual-pol backscatter Analysis
- Derivation and interpretation of dual-pol descriptors
- Applications: Dual-pol SAR data – I
- Applications: Dual-pol SAR data – II



## DAY 3:

- Introduction to full-pol SAR data and its processing – I
- Introduction to full-pol SAR data and its processing – II
- Full-pol backscatter Analysis
- Applications: Polarimetric decompositions and parameters – I



#### DAY 4:

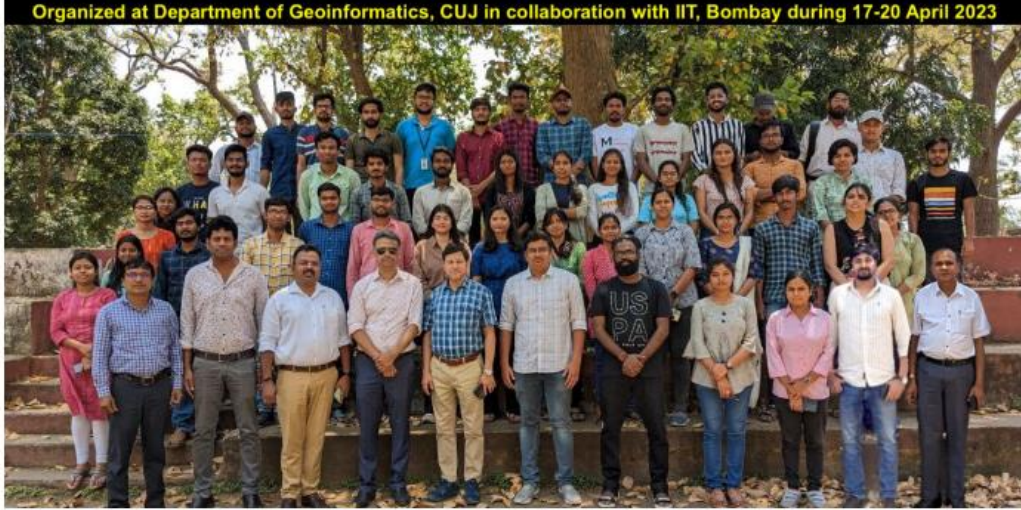
- Applications: Polarimetric decompositions and parameters – II
- Applications: Polarimetric classification and segmentation –
- Interpretation of compact-pol SAR data and its processing
- Applications: Compactpol SAR data





# सीयूजे में माइक्रोवेव रिमोट सेंसिंग डेटा प्रोसेसिंग पर कार्यशाला संपन्न

by Lagatar News — 20/04/2023 in झारखंड न्यूज़, रांची न्यूज़



**Ranchi :** केंद्रीय विश्वविद्यालय झारखंड (सीयूजे) के भू-सूचना विज्ञान विभाग में आईआईटी, बॉम्बे के सहयोग से माइक्रोवेव रिमोट सेंसिंग डेटा प्रोसेसिंग पर चार दिवसीय कार्यशाला गुरुवार को संपन्न हुई. कार्यशाला में कुल 43 छात्रों ने पंजीकृत कराया और इससे लाभान्वित हुए. 17 अप्रैल को कार्यशाला के उद्घाटन सत्र में प्रो अवि क भट्टाचार्य, सीएसआरई, आईआईटी बॉम्बे द्वारा व्याख्यान दिया गया. गुरुवार को कार्यक्रम के अंतिम दिन प्रो एसी पांडे, प्रो मनोज कुमार और प्रो अरुण पाटी ने माइक्रोवेव रिमोट सेंसिंग तकनीक की उपयोगिता पर प्रकाश डाला. अभिनव वर्मा, रिसर्च स्कॉलर, आईआईटी बॉम्बे द्वारा कार्यशाला में प्रशिक्षण दिया गया.