



**Webinar on**

## **Geophysical Investigations- An emerging field in soil exploration**

**Date: 27<sup>th</sup> November (Saturday) 2021 at 11 AM**

Speaker



**Dr. Ashim Kanti Dey**  
Professor, Civil Engineering Department, NIT Silchar

**Meeting link:**

<https://kaksha.webex.com/kaksha/j.php?MTID=me4945aaee9294215efcbcdfff37fb1e7>

Meeting number: 2513 663 5346

Password: bnK2f6pWbm2

## **Abstract**

Geophysical investigations are rapid and economic and are proven to be very effective in certain conditions. However, interpretation of geophysical data requires expertise and experience of the investigator. The investigation is mainly non-invasive and utilizes some specific properties of soil like density, electrical resistivity, seismic, magnetic, electromagnetic etc. to differentiate soil layers, obtain depth of water table, exhibit inclusion of foreign bodies, demarcate location of bed rock, etc. Apart from soil investigation, the geophysical methods are also extensively used in exploration of fossil fuels, mineral deposits, archeological investigation, dam leakage, contaminant flow, etc.

The present presentation will consist of theory and applications of following three investigations:

1. Electrical resistivity
2. Seismic survey mainly Multichannel Analysis of Surface Waves
3. Ground Penetrating Radar

## **About the speaker**

Prof. Ashim Kanti Dey obtained his Bachelor's degree from REC Silchar (now NIT Silchar) with a Gold medal from Gauhati University. Subsequently he joined a Govt service in WBSEB at Kolkata. After six years of the service he joined M.C.E. programme in Jadavpur University and obtained first rank in Geotechnical Engineering. He then joined REC Silchar as a Lecturer in 1992 and pursued Ph.D. from IIT Madras through QIP.

Presently Prof. Dey is working as a Professor (HAG) at NIT Silchar. He guided seven Ph.D. students and supervised 49 M.Tech students so far. He has around 100 publications in National and International Journals and conferences. He is an elected member of IGS and Chairman, Silchar Local Chapter of IGS. He received following awards:

1. **IGS- GEOTECHNICAL BIENNIAL AWARD** for the Best Paper on “nnovations in Field Exploration”, presented by the Indian Geotechnical Society, 2000.
2. **IGS – Shri M.S. Jain Biennial Award 2015** for the best paper on “Innovations in Piling and Other Foundation Construction Techniques”, presented by the Indian Geotechnical Society in Pune, Dec. 2015
3. **IRC – Maharashtra PWD Award 2015** for the best paper on Construction presented by Indian Road Congress in Indore, Dec. 2015

Prof. Dasaka S Murty  
(Chairman, IGS Mumbai Chapter)