



ALMA MATER STUDIORUM
UNIVERSITA DI BOLOGNA

Workshop on In-situ Testing and Geophysical Characterization by

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28th and 29th January 2020

Venue: Golden Jubilee Seminar Hall, Department of Civil Engineering
Indian Institute of Science, Bangalore

This workshop is organised as part of the ongoing SPARC project on “Prediction of soil hydro agricultural properties using Ground Penetrating Radar for improving Agricultural practice” jointly by IISc, Bangalore and University of Bologna, Italy. Is open for Post Graduate and Doctoral Students in Science and Engineering. Few faculty members are also allowed to participate. No registration fee but prior request need to be sent to prvrao@iisc.ac.in with name, affiliation and contact details to receive the confirmation as the number of participants is limited. Participants need to arrange accommodation themselves at their own cost. The participants are requested to bring a laptop with Anaconda/python software for computer exercises.

Tentative schedule

Day 1	28th January 2020
09.30 – 11.10	1. Introduction to Dielectric Spectroscopy
11.10 – 11.25	Break
11.25 – 12.30	2. Applications of Dielectric spectroscopy to agricultural applications (TDR for irrigation management)
12.30 – 14.00	Lunch
14.00 – 16.00	3. Applications of Dielectric spectroscopy to Geotechnical Engineering (Detection of Landslides)
16.00 – 16.15	Break
16.15 – 17.30	4. Applications of Dielectric spectroscopy to Environmental Physics (Ice Mass in Antarctica)
Day 2	29th January 2020
09.30 – 11.10	Acquisition of TDR data
11.10 – 11.25	Break
11.25 – 12.30	Interpretation of dielectric data, TDR data and mixing models
12.30 – 14.00	Lunch
14.00 – 16.00	Identification of relaxation processes. Computer exercises.
16.00 – 16.15	Break
16.15 – 17.30	Derivation of density from TDR data.