

Workshop
on
Forensic Geotechnical Engineering
10.10.2014

Forensic analysis in geotechnical engineering involves scientific and legalistic investigations to detect the causes as well as process distress in a structure, which are attributed to geotechnical origin. Such a critical analysis will provide answer to “what went wrong, when, where, why, how and by whom”. It also gives strong inputs to improve future designs. Since forensic analysis is basically a back analysis and based on failure observation, the normally adopted standard procedures of testing, analysis, design and construction are not adequate for the forensic analysis in majority of the cases. The role of forensic geotechnical engineer (who is different than the expert witness) is often complex and should be able to justify his conclusions in a court of law, hence he needs not only the full knowledge of his field of specialization, good in communication skills but should also be familiar with legal procedures and to be comprehensive to satisfy technical and legal perspectives.

Keeping the above as background, Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana in association with Indian Geotechnical Society, Ludhiana Chapter and technical Committee (TC 302) of International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) organized, a one day workshop on Forensic Geotechnical Engineering. . The workshop was coordinated by Prof. GL Sivakumar Babu. A total of 196 members comprising academicians, researchers, professionals from industry, government organizations and students participated in the Workshop. The workshop was inaugurated by Prof. M.R.Madhav, Ex-Vice President, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) and Shri Mahesh Kumar, Engineer in Chief, PWD(B&R), Haryana was the Chief Guest during the valedictory function. The details of presentation titles and speakers are given below:

Invited Presentation

1. Forensic Investigation of Geotechnical Failures by Dr.G.L.Sivakumar Babu
2. Data Mining in (Forensic) Geotechnical Engineering by Dr. M.R.Madhav
3. Slope failure due to human disturbance leading to malfunctioning of infrastructure- Who is responsible by Dr.S.K.Prasad
4. Investigation of distress in an industrial building on expansive soil by Dr.R.G.Robinson
5. Some case studies of distress and failures in dykes of slurry ponds by Dr. Manoj Datta
6. Field experiences dealing with failures by Sh. Mahesh Kumar
7. Features of Calcutta subsoil and a failure case study by Dr. Kaushik Bandyopadhyay
8. Slope stability analysis and support measures of for subansiri lower hydro electric project by Dr.K.S.Rao
9. Lesson from failures in Expansive soil by Dr.A.S.Rao

Contributory Presentation

1. Malin Land Slide: A case study by S.M.Sarvade and P.S.Khadatare