



**Training of Industry Engineers and Technicians by Department of Civil Engineering, IITRAM**  
**For High Speed Rail Project during March-April, 2021**

Training programs were conducted during March-April 2021 for engineers and technicians of Larsen and Toubro Infrastructure Engineering Limited (LNTIEL) and Indian Geotechnical Services (IGS) for package C6 of High Speed Rail Project; by the faculty members from Department of Civil Engineering, IITRAM. The training modules were developed as per requirements of soil testing for High Speed Rail Project. All Covid-19 protocols were followed and all necessary care was taken during delivery of the training.

The 3-weeks engineers' training on Triaxial and one-dimensional Consolidation testing was conducted by Dr. Kannan Iyer and Dr. Veerabhadra Rotte at IITRAM during 10<sup>th</sup> March 2021 – 31<sup>st</sup> March 2021. The training was conducted for five engineers from M/s Indian Geotechnical Services and LNTIEL. The training commenced with demonstration of undisturbed soil sample extraction at SIMCON laboratory, Ahmedabad for Consolidated Undrained (CU) Triaxial and one-dimensional Consolidation testing. This training covered both theoretical aspects of shear strength and Consolidation process and related testing methods, codal provisions, care to be taken during the testing, and hands on practical exposure on CU triaxial testing and one-dimensional Consolidation testing. The 3-weeks training provided a detailed hands-on experience to the engineers on preparation of the specimen, performing the test, analyzing as well as interpreting the results; so as to enable them to perform the tests for project independently.

The 5-days technicians training was conducted during 19<sup>th</sup> March 2021 – 01<sup>st</sup> April 2021 by Dr. Kannan Iyer, Dr. Veerabhadra Rotte and Dr. Trudeep Dave. The training was conducted for six technicians from M/s Indian Geotechnical Services on 19<sup>th</sup> March 2021 at IITRAM and onsite (Uttarsanda, near Nadiad, Gujarat) during 22<sup>nd</sup> March 2021, 26<sup>th</sup> March 2021, 30<sup>th</sup> March 2021 and 01<sup>st</sup> April 2021. The trainings were aimed at dissemination of theoretical understanding of the tests and their importance, procedure for performing the tests, best practices, codal requirements and care to be taken during the testing and data interpretation.

Certificates were distributed to all the trained engineers and technicians. The training sessions were highly appreciated by the participating engineers and technicians. IITRAM is happy to be actively contributing towards skill development for High Speed Rail Project, a step towards nation building.



**Some glimpses from the Engineers' and Technicians' training conducted at IITRAM for Package C6, High Speed Rail Project**



**Some glimpses from the Technicians' onsite training conducted at Uttarsanda (Near Nadiad), Gujarat for Package C6, High Speed Rail Project**

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From IITRAM team providing engineering services for High Speed Rail Project

**Dr. Kannan Iyer, Dr. Veerabhadra Rotte, Dr. Trudeep Dave**  
**Department of Civil Engineering, IITRAM**

All photographs courtesy: (Faculty members and Ph.D. students, Department of Civil Engineering, IITRAM, IGS team and LNTIEL team)

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