



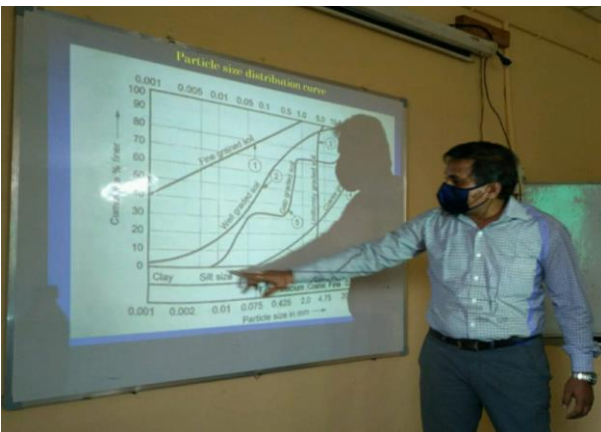
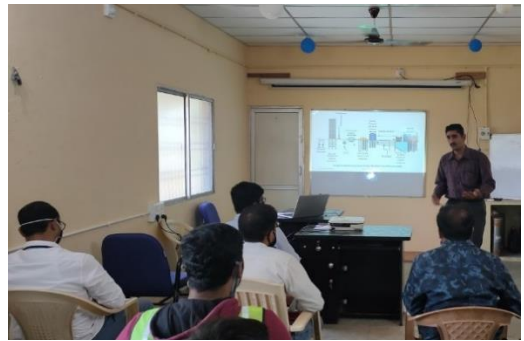
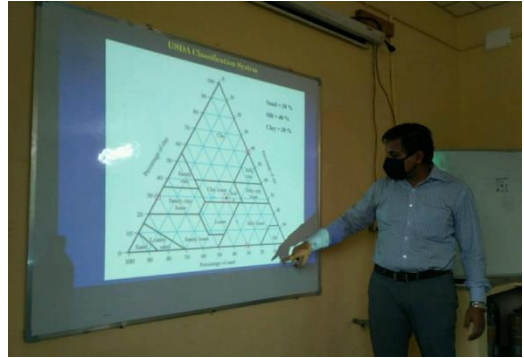
**Training of Industry Engineers and Technicians by Department of Civil Engineering, IITRAM**  
**For High Speed Rail Project during April-May, 2021**

Training programs were conducted during April-May 2021 for engineers and technicians of Larsen and Toubro (L&T), Widmans Laboratory Private Limited and Constell Consultants Private Limited 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 2-weeks engineers' training on Triaxial and one-dimensional Consolidation testing was conducted by Dr. Kannan Iyer and Dr. Veerabhadra Rotte at High Speed Rail Project laboratory, Gamdi, Anand, Gujarat during 26<sup>th</sup> April 2021 – 08<sup>th</sup> May 2021. The training was conducted for eight engineers from Larsen and Toubro (L&T), Widmans Laboratory Private Limited and Constell Consultants Private Limited. The training commenced with demonstration of undisturbed soil sample extraction at IGS laboratory, Uttarsanda, Gujarat 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 2-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 26<sup>th</sup> April 2021 – 08<sup>th</sup> May 2021 by Dr. Kannan Iyer and Dr. Veerabhadra Rotte. The training was conducted at High Speed Rail Project laboratory at Gamdi, Anand, Gujarat for six technicians from Widmans Laboratory Private Limited and Larsen and Toubro (L&T). The training was 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 by IITRAM faculty members at High Speed Rail Project laboratory (Package C6), Gamdi, Anand, Gujarat**



**Some glimpses from the Engineers' and Technicians' training conducted by IITRAM faculty members at High Speed Rail Project laboratory (Package C6), Gamdi, Anand, Gujarat**

**Acknowledgement:**

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Project. Thanks are also extended to L&T team, Mr. Akhilesh Kumar Singh, Mr. Jai Prakash Reddy, Mr. K. V. Sivannarayana, and other team members, Widmans team, Mr. Amit Bisnoi, and other team members, for their kind cooperation and support during the planning and conduct of training. Thanks are also extended to Mr. Satyapal and other team members from IGS laboratory, Uttarsanda, Gujarat for helping in demonstration of undisturbed soil sampling to the participants. Thanks are also extended to Dr. Manoj Langhi (Coordinator, Civil Department, IITRAM) and other faculty members from Civil Department, IITRAM for their motivation and support. We express our thanks to office, library and accounts, IITRAM for their support. We thank all the participants for their active participation during the training.

From IITRAM team providing engineering services for High Speed Rail Project

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

All photographs courtesy: (Dr. Kannan Iyer, Dr. Veerabhadra Rotte, L&T team, Widmans team, Constell team)

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