

A Report
on
One Week STTP

RECENT RESEARCH TRENDS IN TRANSPORTATION AND GEOTECHNICAL ENGINEERING

(29TH DEC. 2014 - 2ND JAN. 2015)

Marwadi
education foundation


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5 Days
Short Term
Training Programme

29th December, 2014 to
2nd January, 2015

**Recent Research Trends in
Transportation and
Geotechnical Engineering**
(RRTTGE-14)

Organized By
Department of
Civil Engineering

Co-sponsored By
Zydex  **Endeavor**
www.endeavor.org

Coordinators
Dr. Yogesh U. Shah, Dr. Siddharth G. Shah
Venue
MB 403, 4th Floor, B-Wing, Engineering Main building

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COORDINATORS

Dr. Yogesh U. Shah, Associate Professor, MEFGI
Dr. Siddharth G. Shah, Head FOPG, MEFGI

Prepared By: Prof. Sadanand Sahu, Asst. Prof., Civil Engg. Dept. MEFGI, Rajkot
Dr. Yogesh U. Shah, Associate Prof., Civil Engg. Dept., MEFGI, Rajkot

STTP - “RECENT RESEARCH TRENDS IN TRANSPORTATION AND GEOTECHNICAL ENGINEERING”

ABOUT MEFGI

The Technical Campus at Gauridad is the first of its kind Integrated Campus that is offering Professional technical education under the umbrella of MEFGI in the state of Gujarat at Rajkot. It is affiliated to Gujarat Technical University, approved by AICTE and is presently offering graduate and post-graduate courses in various disciplines of Engineering, Computer Applications (MCA) and Management (MBA + PGDM).

MEFGI is a State of Art campus with an excellent Infrastructure spreaded in 3 Acres of lush green land. Campus has more than 400 faculties.

ABOUT CIVIL ENGINEERING DEPARTMENT

Civil Engineering Department is the one of the active departments of MEFGI and is imparting quality education since 2008. The department has well qualified and experienced faculties with excellent laboratories and offering research and consultancy services. The Department runs an under graduate programme and two post graduate programmes (M.E – Structures and Transportation).

The Department has ACI-India student chapter and is a member of Hydrological Data Usage Group of Govt of Gujarat.

ABOUT STTP

The one week long STTP presents the recent researches in the field of transportation and geotechnical engineering. It also discusses the current issues related to the same.

OBJECTIVES OF THE PROGRAMME

Transportation engineering applies scientific and technical knowledge to provide economical and efficient transportation service that meets societal needs while maintaining compatibility with environmental, energy and safety goals. Geotechnical engineering is concerned with investigation of subsurface conditions and materials;

assessing the risks posed by site conditions; designing of earthworks and structure foundations for the construction occurring on the surface or within the ground.

The primary goal of this short term course is to provide the participants with an in-depth understanding on recent trends in the area of **Transportation and Geotechnical Engineering**.

ABOUT PARTICIPANTS

There were total 54 participants who constituted of 25 in-house civil department faculties, 9 outside participants and 20 PG students.

COURSE CONTENTS

- Urban Transportation Planning
- Traffic Flow Analysis & Control
- Pavement Evaluation & Management
- Ground Improvement Techniques
- Geotechnical Investigation and Testing
- Soil Dynamics and Earthquake Engineering
- Reinforced Earth and Geosynthetics

EMINENT SPEAKERS

- Dr. L. B. Zala, BVM, VV Nagar
- Dr. G. J. Joshi, SVNIT, Surat
- Dr. H. R. Varia, TEC, Modasa
- Dr. P. J. Gundaliya, LDCE, Ahmedabad
- Dr. A. M. Jain, SVIT, Vasad
- Dr. C. H. Solanki, SVNIT Surat
- Dr. D. L. Shah, MSU, Vadodara
- Dr. A. K. Verma, BVM, VV Nagar
- Dr. G. N. Gandhi, President, IGS
- Dr. Sandeep Trivedi, Indus, Ahmedabad

SCHEDULE OF THE STTP

Date Time	29/12/14 (Monday)	30/12/14 (Tuesday)	31/12/14 (Wednesday)	1/1/2015 (Thursday)	2/1/2015 (Friday)
9:30 - 10:00	Registration	Tea/Breakfast			
10:00 - 11:30	Inauguration	Dr. Sandip Trivedi – Liquefaction potential assessment	Dr. L. B. Zala Urban Transportation Planning	Dr. D. L. Shah- Geotechnical Investigation	Dr. G. J. Joshi - Traffic Flow Analysis and Control
	Dr. G. N. Gandhi - Ground Improvement for Earthquake Resistant Structures				
11:30 - 11:45	Tea Break				
11:45 - 1:00	Dr. G. N. Gandhi - Dams on Rock Foundations-Case Studies	Dr. Sandip Trivedi – Seismic Microzonation of Ahmedabad- A Case Study	Dr. L. B. Zala Urban Transportation Planning	Dr. D. L. Shah- Grouting Technology	Dr. G. J. Joshi - Traffic Flow Analysis and Control
1:00 - 1:30	Lunch Break				
1:30 - 3:00	Dr. P. J. Gundaliya - Urban Transportation Planning	Dr. H. R. Varia - Adaptive Traffic Control Signal	Dr. A. K. Verma – Behaviour of Reinforced Earth Beds under Static loading	Dr. A. M. Jain Discrete Choice Modeling	Dr. C. H. Solanki - Prediction in Geotechnical Engineering
3:00 - 3:15	Tea Break				
3:15 - 4:45	Dr. P. J. Gundaliya - Urban Transportation Planning	Dr. H. R. Varia - Coordination of Pre-Timed Traffic Signals	Dr. A. K. Verma – Behaviour of Reinforced Earth Beds under Dynamic loading	Dr. A. M. Jain Discrete Choice Modeling	Dr. C. H. Solanki - Geotechnical Investigations
					Valedictory and High-tea

INAUGURAL SESSION

The STTP was chaired by Chief Guest Dr. Y. P. Kosta Sir (Honourable Director, MEFGI Engineering Campus), Dr. G. N. Gandhi (Guest of honor & Keynote Speaker, President IGS, Ahmedabad), Prof. Ankur Bhogayata (Head FOE, Civil Engineering Department), Dr. Siddharth G. Shah (Head FoPG and STTP Co-ordinator) and Dr. Yogesh U. Shah (Associate Prof., CED and STTP Co-ordinator). All the faculty and student participants were also present during the inauguration of STTP.

As per the Indian tradition, the STTP was inaugurated with Prayer and Lighting of the lamp. Dr. Yogesh Shah, STTP Coordinator had welcomed all. He had given introduction of all Dignitaries on the dais and invited guests.

Prof. Ankur Bhogayata, Head, FOE, CED, introduced all about the department and its activities.

Dr. Siddharth Shah, Head FoPG, CED, had briefed all about the STTP and its importance. He explained various outcome of the program. He had given brief outline of program and requested to all participants to enrich their knowledge from this STTP by effective participation.

Dr. G. N. Gandhi, Guest of Honour and Expert, gave the inaugural address and gave best wishes to the Department for successful completion of the STTP.

Dr. Y. P. Kosta, Chief Guest, Hon'ble Director, MEFGI Engineering Campus shared his views for the program. He informed that MEFGI always supports these kinds of faculty development programs through which the knowledge can be passed to students for their development in modern era. He congratulated the Department for organizing such a program which indirectly benefits to society.

All the technical sessions were delivered then after as per the schedule by experts from relevant fields.

Few glimpses of Inaugural function of STTP on 29.12.2014 are given below:



ABOUT THE EMINENT SPEAKERS AND THEIR EXPERT TALKS

Dr. G. N. Gandhi, President Indian Geotechnical Society, New Delhi.

Topic: (i) Ground Improvement for Earthquake Resistant Structures and Dams on Rock Foundations-Case Studies.

(ii) Dams on Rock Foundations-Case Studies



Dr. P. J. Gundaliya, Associate Professor

L. D. College of Engineering, Ahmedabad

Topic: Urban Mass Transit System Planning

Dr. Sandip Trivedi -Professor & Head, Department of Civil Engineering, Indus Institute of Technology & Engineering., Ahmedabad

Topic: (i) Liquefaction Potential Assessment

(ii) Seismic Microzonation of Ahmedabad- A Case Study



Dr. H. R. Varia – Principal, TITS, Modasa

Topic: (i) Adaptive Traffic Control Signal and Coordination of Pre-Timed Traffic Signals.

(ii) Coordination of Pre-timed Traffic Signals

Dr. L. B. Zala - Professor & Head Civil Engineering Department. BVM, Vallabh Vidyanagar

Topic: Transportation System Challenges, Opportunities and Demand Forecasting and Demand Forecasting: Use of TransCAD



Dr. A. K. Verma – Professor & Head, Structural Engineering Department, BVM, Vallabh Vidyanagar.

Topic: Behaviour of Reinforced Earth Beds under Static loading.

Dr. D. L. Shah - Professor, Applied Mechanics Department, Faculty of Technology & Engineering. MSU, Vadodara

Topic: Expansive Soils- Identification, Detection and Remediation and Grouting Technology



Dr. A. M. Jain- Associate Professor, Civil Engineering Department. SVIT Vasad.

Topic: Discrete Choice Analysis: Application in Transportation Engineering.

Dr. G. J. Joshi – Associate Professor, Civil Engineering Department. & Dean Academic SVNIT, Surat.

Topic: (i) Traffic Flow Characteristics for Different Roadway Elements and Traffic Forecast: Fundamentals & A Case Study

(ii) Traffic Forecast : Fundamentals and a Case Study



Dr. C. H. Solanki – Professor, Applied Mechanics Department, SVNIT, Surat.

Topic: Quick Settlement Computation of Cohesive alluvial deposits Using New Empirical Correlation for compressibility Parameter.

GLIMPSE OF THE VARIOUS EXPERT LECTURES:



FEED BACK BY PARTICIPANT:

Most of participant rated the STTP very good /excellent as a whole. As per their feedback course contents, facilities and food were excellent. They also cited the need for arranging software related training programme and field visits in future.

VALEDICTORY SESSION:

The STTP was concluded with valedictory function on 02.01.2015. In the Valedictory function, two Experts of the day, Dr. G. J. Joshi and Dr. C.H. Solanki from SVNIT, Surat and the three heads of the civil engineering department Dr. S. G. Shah, Prof. Tarak Vora and Prof. Ankur Bhogayata were remain present. The concluding remarks were given by Dr. Siddharth Shah and Dr. Yogesh Shah, STTP Coordinators. All the participants were distributed with the certificates on successful completion of one-week STTP by dignitaries on the dais.

The Vote of thanks was given by Dr. Yogesh Shah, STTP Coordinator. He highlighted the immense contribution of the various sponsors and organizers and special thanks to Shri Ketanbhai Marwadi Sir Chairman and Shri Jitubhai Chandarana Sir Vice-Chairman of MEFGI Campus for their constant support for the STTP.

The valedictory session ended with the national anthem.

GLIMPSES OF VALEDICTORY FUNCTION





GROUP PHOTO OF PARTICIPANTS AT RRTTGE-14





ON BEHALF OF ORGANIZERS

COORDINATORS

Dr. Yogesh U. Shah, Associate Professor, MEFGI, Rajkot
Dr. Siddharth G. Shah, Associate Prof., Head FOPG, MEFGI, Rajkot