



## **Sarvajani College of Engineering and Technology**

### **Department of Civil Engineering**

#### **Expert Talk**

#### **On**

### **“Soil Properties and Investigations for Foundation Structures”**

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#### **Objectives of the Talk:**

- To give fundamentals of Soil Mechanics, Soil Classification, Behaviour of different soil, types of Foundations & Settlement of Buildings, Soil Sampling – Testing methods, Related Field case studies.
- Give brief idea of Soil Exploration, Its significance & Preparation of Soil Investigation Report

**Resource Person:** Dr. C.H. Solanki, Prof. & Head, Applied Mechanics Dept, SVNIT, Surat

**Venue:** TIFAC Seminar Hall

**Date & Time:** 18th Jan 2017, 09:30 am on wards

**Participants:** (80 +) 3rd & 4th Year Undergraduate Students

#### **Summary:**

The session of An Expert Lecture on “Soil Properties and Investigations for Foundation Structures” was organized by the Department of Civil Engineering.

Dr. Pratima A. Patel (Prof. & Head C.E.D) commenced the session at 9.30 a.m. and welcomed the audience.

Prof. Payal Zaveri gave a brief introduction about the speaker Dr. C. H. Solanki, Professor and Head of Applied Mechanics Dept. S.V.N.I.T., Surat. Mr. Paresh Lathia & Mr. Nilesh Savani (Class Representatives) welcomed Dr. Solanki and his guest with flowers as a token of love and affection.

Dr. C. H. Solanki has 25 years of academic research experience in the areas of geotechnical engineering, ground improvement techniques and geoenvironmental engineering. He is currently involved in DST project which is discussed further in detail. He has authored/co-authored over 190 publications and guided over 35 M.Tech.Thesis with 5 in progress also 10 Ph.D. theses with 8 ongoing to his credit on geotechnical/geoenvironmental engineering.

He as delivered about 25 expert Lectures at various renowned institutes. Under his guidance 8 Ph.D scholars has completed their Ph.D and 35 Students has completed their Masters.

Dr. C.H. Solanki has covered wide variety of academic related topics in geotechnical engineering where students has the lacuna in various challenging topics like sub soil investigations, interpretations and different types of soils. His discussion was mainly highlighting the very important parameters in geotechnical engineering like settlement, Shear failure and liquefaction of subsoil's. When carrying out investigations for an available site it is important to focus on mainly field reconnaissance, exploration, laboratory Investigations, geotechnical Interpretations and analysis etc.

Discussion of field investigation and number of borings and depth to be conducted for the site based on the importance of structure was clearly out spoken and the gap between academic and field knowledge was connected particularly in this part of the expert talk. Along with the very important field testing methods like standard penetration method, dynamic cone penetration test and vane shear test was explained in detail to the audience as per IS code practice. Then with use of this raw data interpretation of important)  $\phi$  parameters like bearing capacity, settlement using SPT "N" value and (angle of internal friction the very important parameters in soil for strength parameters are concerned.

Finally the session was concluded by vote of thanks by. Feed back of this talk given by our students Mayuri Khatri & Naimesh Jariwala .All faculty members of the department has participated in this event and encourage the students. We acknowledge and thank Sarvajanik Education Society and Sarvajanik College of Engineering & Technology for providing the necessary infrastructure for conducting the expert talk.

We also thank to Dr. Vaishali Mungurwadi, Principal, and SCET for her guidance and motivation in organizing the expert talk.

Herewith we have attached some glimpses of our expert lecture.



