

**Report on Industrial Visit to” CSIR-Structural Engineering Research Centre,  
CSIR Campus ”**

1.	Name of the Activity/Event	Industrial visit		
2.	Date of the Activity/Event	26-09-2023		
3.	Organized by/ Name of the committee	Department of civil Engineering		
4.	Place of Activity/Event	Narayana Engineering College, Nellore		
5.	Resource Person/ Guest/ Organization	Balakrishnan, Skill and Human Resource Development Division, CSIR-Structural Engineering Research Centre, CSIR Campus, CSIR Road, Tharamani, Chennai 600113, Tamilnadu, INDIA.		
6.	Type of Activity/Event	Technical		
7.	Activity/Event Objectives	To create awareness on Modern equipments used in civil Engineering		
8.	Participation	Students	Faculty	Total Participation
		52	4	52
9.	General Remarks	Gained knowledge on New Civil Engineering Equipments.		
11.	Signature of In charge/ Convener			

The Department of Civil Engineering of Narayana Engineering College, Nellore had arranged a one day Industrial Visit for II B. Tech & III B. Tech Students to CSIR-Structural Engineering Research Centre, CSIR Campus, Chennai ,on 26/09/2023.Students Started their journey at early morning at 5:30 Am and Reached at nearly 11:00Am.



Started Industrial Visit to CSIR Campus, Chennai

Firstly Visited Civil Engineering, Structure Engineering Laboratory. The Guide Explained different Concrete structures, different types of load condition, he explained the beam structural elements loading concept and crack patterns. The laboratory has a load frame crane 50 Tonne Capacity by motorized.



### Images taken at Structural Engineering Laboratory

After visiting to Structural Engineering laboratory guide mentioned to Visit the Fatigue and fracture Laboratory. He explained the Static load conditions, Fatigue and fracture assessment on large size components of power plant and offshore structures, also explained the behavior predication of bi-metallic pipe welded joints. He also said Fracture investigation on Structural components under the internal pressure elevated temperature ,Torsion and bending .He gave the detail view on XFEM methodologies for fracture analysis for Stiffened and unstiffened plates.



### **Captures of Fracture & Fatigue Laboratory**

Students also visited the Wind Engineering Laboratory there the Professor explained about the Wind tunneling, professor Srinivas explained a few things like Characterization of turbulence during cyclone wind conditions .Aerodynamic pressure and force coefficients for tall buildings with various unconventional shapes, low-rise industrial structures, solar panels, etc. Aerodynamic and aeroelastic effects on tall buildings, chimneys, cooling towers, etc., under isolated and interference conditions Development of semi-empirical method for predicting the across-wind response of chimneys Evaluation of flutter derivatives for bridge decks with specific geometries.



### **Snaps of Wind Engineering and Advanced Material laboratory**

There are many Laboratories like Material Testing Laboratory, Seismic Engineering Laboratory, Precast Members Laboratory, Concrete Laboratory. Students gained lots of information through this CSIR Structural Engineering Research Centre, and practically understood the Scenarios that's occurring at the Present Civil engineering studies. The Research Center is well designed equipment's & advanced machines, it's a very use full Industrial Visit for both the students and the Faculty Members.

**Faculty-In charge**

**HOD**