B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956
GST Road, Vandalur, Chennai 600 048

SCHOOL OF INFRASTRUCTURE

DEPARTMENT OF CIVIL ENGINEERING

Ref. : 769A/Dean(Sol)/0424 **Date: 15.04.2024**

Guest lecture on

"SEISMIC ANALYSIS & DESIGN OF STRUCTURES (IS1893- DRAFT 2023)"

Date: 16/02/2024 **Time: 10.00 am to 11.30 am**

I. PREAMBLE:

A guest lecture on 'SEISMIC ANALYSIS & DESIGN OF STRUCTURES (IS1893- DRAFT 2023)' was organized by the Department of Civil Engineering, B S Abdur Rahman Crescent Institute of Science and Technology on 16.02.2024, from 10.00 am to 11.30 am in Seminar hall, Department of Civil Engineering.

II. ABOUT THE SPEAKER:

Dr. Prawin Jayakumar, Senior Scientist at CSIR-Structural Engineering Research Centre, Chennai. He completed his Bachelor's degree in Civil Engineering from PSG College of Technology, Anna University, Coimbatore. He did hid Master of Engineering in Structures and Ph.D in Structural Engineering from CSIR – Structural Engineering Research Centre (SERC), Chennai, Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, India. Dr. Prawin handled various R & D – CSIR, GAP, Sponsored and Consultancy Projects. His areas of research include Nonlinear System Identification Techniques for Structural Health Monitoring, Nonlinear parametric identification of engineering structures etc., He has more than 33 publications to his credit and also authored more than 10 book chapters.

III. ABOUT THE SESSION:

Dr. M. S. Haji Sheik Mohammed, Professor & Dean, School of Infrastructure, welcomed the participants and honored the speaker with a memento and a shawl, Dr. A. K. Kaliluthin, Associate Professor & Dy. Director (Campus Development & Maintenance) introduced the speaker to the audience. The focus of the talk was on the release of IS1893 - Draft 2023, Draft Indian Standard Criteria for Earthquake Resistant Design of Structures Part 1 General Provisions [Seventh Revision

of IS 1893 (Part 1)] and brief the purpose of the codal provisions and its importance to apply while designing the earthquake resistant structures. He also explained about the earthquake loads and its effects as per the draft version. The speaker explained about the importance of Ductile detailing in the structure to resist the Earthquake loads. He comparatively presented the changes brought in the draft from the old revisions of the code in the following criteria:

Guest Lecture Brochure

- The change in the Seismic Zones of India,
- Lateral force Factor($\mathbf{A_h}$),
- Percentage of Imposed load projected during an earthquake,
- The changes brought in the Empirical formula to attain it,
- The changes in the return period and probability of occurrence of an earthquake.

The guest lecture wrapped up well and the students were encouraged for open discussion with the speaker to clarify their doubts. The students of 1st Year and 2nd Year, M.Tech, Structural Engineering participated in this guest lecture and get benefitted.

The lecture is related to the syllabus content in Module III “Seismic Methods of Analysis” - in the course “CEEY 202 – CEE 6212 – Earthquake Resistant Design of Structures”. The program ended with the vote of thanks delivered by Dr. A. K. Kaliluthin.

Honoring the chief guest

M. Tech. Structural Engineering students and Faculties attended the lecture

III. DETAILS OF PARTICIPANTS:

The following are the list of participants attended the lecture:

S. No	NAME
1.	CHARUMATHI M
2.	HRITHIK RAMKUMAR A
3.	MUHAMMAD IBRAHIM L
4.	NAVEEN.E
5.	SARAN.T
6.	SHAIK DAVOOD
7.	PRAVEEN J
8.	ASHAR EQBAL
9.	BASHARATH AL HASAN PM
10.	MOHAMED FAZIL SADIQ BATCHA
11.	MOHAMED YASIN A M
12.	NOORUL AMEEN M
13.	THASMEER KHAN MH
14.	UMAR NAVAJ J
15.	VIDHYA R
16.	VIGNESH R
17.	VIGNESHWAR M
18.	VISHNU SHARAN K
19.	Dr. UMAR
20.	Dr. GAJALAKSHMI

IV. OUTCOME

The outcome of the guest lecture is that participants are enriched with the ability to perform the seismic analysis of structures using various methods as per the new code IS 1893- DRAFT 2023 and gain knowledge on the fundamentals of load calculation for various structural systems, design and detailing aspects of structures subjected to earthquake loading as per the codal guidelines. This contributes to achieving " Sustainable Development Goals (SDG 9 and 11)" ensuring to build resilient infrastructure, promote sustainable industrialization and foster innovation.

Dr. A.K. KALILUTHIN
Associate Professor &
Dy. Director (CDM)

Dr. M.S. Haji Sheik Mohammed
Dean, School of Infrastructure