

Technical Lectures on Advancements in Concrete Technology

Date: November 7, 2024

Venue: Gayatri Vidya Parishad College of Engineering (Autonomous), Visakhapatnam

Introduction:

A series of insightful technical lectures on Precast Concrete and Earthquake Safety of

Concrete Structures were held at Gayatri Vidya Parishad College of Engineering (A),

organized under the Indian Concrete Institute (ICI) Student Chapter. The event brought

together experts from various sectors of the Civil Engineering field, creating a platform for

both students and professionals to exchange ideas and deepen their knowledge on key

advancements in concrete technology and structural safety.

Dignitaries in Attendance:

Prof. Dr. Ing. P.S. Rao

Former Dean of Industrial Consultancy & Sponsored Research, Former Professor of

Civil Engineering, IIT Madras, Founding Member of ICI, President, Gayatri Vidya

Parishad

• Prof. C.V.R. Murthy

Prof. P.S. Rao Chair, Professor, Department of Civil Engineering, IIT Madras

Dr. G. Papa Rao

Head, Department of Civil Engineering, GVPCE (A)

Prof. P. Veerabhadra Rao

Professor of Practice, Department of Civil Engineering, GVPCE (A), Dean of

Infrastructure, Planning & Development, GVPCE (A)

Dr. G. Madhuri

Associate Professor, Department of Civil Engineering, GVPCE (A), Treasurer, ICI

Vizag Chapter, Coordinator, ICI Student Chapter, GVPCE (A)

Faculty Members

Students

Event Proceedings:

The event was inaugurated by Prof. P. Veerabhadra Rao, who welcomed the distinguished guests and attendees. He emphasized the importance of such events in fostering collaboration between students, faculty, and professionals, helping bridge the gap between academic learning and real-world engineering practices. Prof.P.Veerabhadra Rao fondly recounted his longstanding association with Prof. Dr. Ing. P.S. Rao, reminiscing about their contributions to structural engineering, including the foundational years of Gayatri Vidya Parishad College of Engineering (A), began in 1995. He also noted the occasion of Prof. Dr. Ing. P.S. Rao's 88th birthday, with attendees extending heartfelt wishes in recognition of his immense contributions.

Prof. Dr. Ing. P.S. Rao's Address:

In his address, Prof. P.S. Rao shared his reflections on the early years of GVPCE and the formation of the Indian Concrete Institute (ICI). He delved into the foundational role of ICI in advancing concrete technology across India, outlining how the organization emerged from the success of an international conference in Chennai in the 1980s. Prof. Rao also spoke about the collaborative approach ICI has promoted over the years, bringing together researchers, designers, and contractors to continuously improve concrete technology.



Prof. C.V.R. Murthy's Lecture on Earthquake Safety of Concrete Structures:

Prof. C.V.R. Murthy delivered an engaging lecture on earthquake-resistant design, focusing on safety, resilience, and sustainability in modern concrete structures. He outlined the evolution of structural design codes, transitioning from traditional stiffness-based methods to more modern approaches that emphasize energy dissipation and minimizing structural damage during seismic events. Prof. Murthy underscored the growing importance of resilience in construction, particularly reducing repair costs and downtime post-earthquake, while also advocating for interdisciplinary collaboration in designing buildings in earthquake-prone regions.



Prof. Veerabhadra Rao's Lecture on Precast Concrete Systems:

Prof. Veerabhadra Rao presented a thought-provoking lecture on the application of precast concrete in modern construction. Drawing from his extensive experience, he discussed innovative design elements such as double walls and reinforcement, which contribute to enhanced safety and stability in precast structures. He elaborated on the structural design of various precast components and how these systems can withstand external forces, particularly during seismic events. His lecture also highlighted the challenges and solutions encountered in the design and execution of these structures, emphasizing the critical role of meticulous planning and engineering expertise.



Conclusion:

The event at GVPCE(A) proved to be a resounding success, providing a platform for meaningful discussions on the latest advancements in concrete technology and earthquake engineering. The insights shared during the lectures highlighted the growing significance of resilience, sustainability, and collaboration in shaping the future of structural design. With contributions from leading experts in the field, the event offered a valuable opportunity for students to learn about cutting-edge developments in construction practices.

The lectures not only bridged the gap between academic research and industry application, but also reinforced the essential role of collaborative learning in addressing modern challenges in civil engineering. The event underscored the importance of continuous knowledge-sharing to foster the next generation of engineers capable of addressing evolving global challenges in the built environment.