

# INDIAN CONCRETE INSTITUTE TECHNOLOGY CENTRE CHENNAI



# **TALL BUILDINGS**

# **USAGE OF PRECASTING AND PRESTRESSING TECHNIQUES**

on 29  $^{\text{\tiny{th}}}$  and 30  $^{\text{\tiny{th}}}$  of July 2022,

at ICI Technology Centre, Chennai.

# What is unique about the programme?

- Practice oriented programme
- \* Industry Experts share their experience
- \* Programme encompasses all essential aspects of tall structures.
- \* Latest on materials and processes shared

#### Who should attend?

- \* Practitioners from construction industry
- \* Site Engineers
- \* Consultants
- \* Designers
- \* Research Scholars & PG Students.

# **Panel of Experts**



#### Er. Vinay Gupta

Civil Engineer from BITS, Pilani (1983) and Director & CEO, M/S Tandon Consultants Pvt Ltd, specialises in bridges, flyovers, underground & elevated metro structures, 275m tall chimneys, etc. Active member of various Code Committees of BIS and IRC. Er Gupta is the all India President of IIBE and ICI, both. He is also Vice President, ACF (Asian Concrete Federation) and Vice President, IAStructE (Indian Association of Structural Engineers).

Er. Ajit Bhate

Er Ajit Bhate, a pioneer in the world of sophisticated Precast Construction Industry scenario in India; in 2012 set up the first world class Precast concrete element production factory in Pune, India called Precast India Infrastructures Pvt. Ltd., after intense research of requirements of prefabrication in Indian conditions.



Being an expert in Conventional Contractor, his other conventional construction Contracting Company Bhate and Raje Construction Company Pvt. Ltd. together with Precast India Infrastructures Pvt. Ltd., has hit the Indian market as an enviable combination of speed, quality of time.

Er Bhate also encourages research and development leading to multiple Patent Processes involving Precast India. He is a recipient of a number of awards for various conventional and high volume Precast projects; the focus also being special and challenging projects needing high technical expertise.

#### Er. Seelam Prasad

Er. Seelam Prasad received M-Tech. in Geotechnical engineering & also holds an M.E degree in Structural Engineering with first class and distinction. Having more than twenty years of professional experience, he started his career as Geo technical engineer with PV Raj & Company and as Design engineer with Sumadhura Technologies Pvt Ltd Hyderabad for Irrigation projects. For the last seventeen years, has been working with UTRACON Structural Systems



Private Limited. Currently holding the position of Vice President of Designs (Buildings) at UTRACON. Has been involved in Design and Detailing of various buildings, mixed development projects, Storage tanks, and minor bridges.



#### Ar. Shabnam Shaiva

With over 30 years of experience working with world-renowned architects and high-profile international and Indian clients, Architect Shabnam Shaiva is experienced in commercial, residential, hospitality, and institutional design and details. She's a high-energy professional with a track record of assembling and coordinating large-scale projects under tight deadlines. Since the year 2021, Shabnam

has been a partner at Archohm.

Prof. K.P. Jaya

Prof.K.P.Jaya holds a Ph.D. in Structural Engineering from IIT Madras. Her areas of specificalisation are structural dynamics, earthquake engineering, reinforced concrete structures, precast structures, vibration control, wind engineering, soil-structure interaction, etc. Currently, she is the Director, Centre for Research, Anna University, Chennai. She is a Panel Member of CED 39 and CED 2 BIS Code



Committees. She has presented several technical papers, in International and National Journals and Conferences.



#### Er. Amit Barde

Er. Amit Barde heads the Precast Initiative for Buildings & Factories IC of L&T Construction. He has been actively involved in developing and promoting Precast Technology adoption in the Residential and Commercial Buildings Sector in India for last ten years. Before he joined L&T, he worked for about a decade in the United States with a leading precast concrete manufacturer. He is known for his expertise

in a variety of residential, commercial and industrial precast concrete buildings and has designed and managed several precast concrete projects such as data centers, office buildings, schools, warehouses, industrial plants, stadiums and parking structures.

Er. Amit graduated with honors from Government College of Engineering, Pune and later pursued higher studies at the prestigious Purdue University, USA to complete MS in Civil Engineering. Recently, he also completed his Executive MBA from the Indian School of Business, Hyderabad. He is a member of ICI (India). He is a licensed Professional Structural Engineer in the US & Navi Mumbai and is also a USGBC, LEED Certified Professional.

#### Er. Satish Priyadarshan V

Er. Satish is currently working as Precast Product line Manager for Dextra India Pvt. Ltd and is responsible for Precast Business Indian Region. By Qualification, he is a Mechanical Engineer with a Master's in Business Administration in Marketing & Finanace. He has a varied experience in various industries like Heavy Material Handling, Metro's, Nuclear Power and Precast. He has overall 13+ years of experience in construction industry.



He has worked in Marquee Infrastructure project in likes of MRPL, KKNPP, FRFCF in nuclear segment as well as some of the major precast projects like Amaravati Judicial Complex, Express Exclusive, BOSCH Bangalore, Galaxy- Orbit Hyderabad, Vaishnavi Tech. square, Chennai Silks, AP – Govt Jet City, HRRL Refinery, IOCL Refinery, Vizag Refinery CIDCO, Sea bird & Water Tanks to name a few.



#### Prof. Mehar Prasad

Prof.Mehar Prasad A, holds Ph.D. in Civil Engineering from Rice University, Houston, Texas USA. His areas of specialisations are Structural Dynamic, Earthquake Engineering, Structural Stability, Structural Analysis, Dynamic Analysis, Finite Element Analysis, etc. Currently he is Professor in Indian Institute of Technology. He has published hundreds of papers in various journals and presented

papers in National and International Conferences.

#### Dr. Prem Krishna

Dr. Prem Krishna, obtained his BE(Civil) degree from University of Roorkee in 1959, followed by ME(Struct.) in 1961. He has a PhD from Imperial college, London, 1964. Served the faculty of the University of Roorkee from 1964 to 1998. Also had teaching assignments at University of Illinois, Urbana, USA, and Imperial College, London. Dr. Krishna specializes in Wind Engineering, Cable suspended



structures and Steel structures. He was honoured with the International Association of Wind Engineering Presidential Award for career-long contributions in the subject in 2021.



### Er. Anjana Krishnan

Er. Anjana is a key member of RWDI's wind loading team and has worked on 200+ projects from all over the world. She is a valuable resource to our clients in supporting the design of wind-sensitive structures such as tall buildings, long-span roofs and airports and by developing technically efficient and cost-effective solutions. Anjana combines deep technical knowledge with extensive experience in

tackling complex engineering challenges. She has worked on major projects in India including Navi Mumbai Airport, Noida International Airport, Google Campus at Hyderabad, Infosys Campus at Noida, Surat Municipal Building, Titanium World Tower, etc. Worked with major clients like L&T, Buro Happold, Sterling, STUP, Meinhardt and so on. Experienced in structural, cladding and roof studies. Masters in Structural Engineering from University of Kerala with Gold Medal.

#### Dr. Satish Jain

With over 22 years' experience in structural engineering, Dr. Satish Jain has engaged in design across both India and the USA. Dr. Jain has his Ph.D. and M.S. in Structural engineering from Lowa State University, USA and is a licensed structural engineer in both countries. His expertise spans design with Ultra High-Performance Concrete, concrete, steel, prestressing and Performance based seismic design.



Dr. Jain is credited with founding India's first commercial indigenous Ultra High Performance Concrete premix manufacturing unit and his current initiatives involve promoting the use of UHPC in India through design, material manufacturing, application development, training, R&D and project management services.

#### **PROGRAMME SCHEDULE**

Day 1	Topics and Speakers
09.30-10.00	Registration
10.00-10.30	Overview of the Workshop :Er.Vinay Gupta
10:30-11:00	Tea Break
11:00-12:00	Structural Concepts in Tall Buildings: Er.Vinay Gupta
12:00 -13:00	Wind Aspects of Tall Buildings: Dr. Prem Krishna
13:00 -14:00	Lunch Break
14:00-15:00	International Concepts in Aesthetics of Tall Structures: Ar. Shabnam Shaiva
15:00-16:00	Seismic Aspects of Tall Buildings: Prof. Mehar Prasad
16:00 -16:30	Tea Break
16:30-17:30	Design of Joints & Connections in Precast Buildings: Prof.K.P.Jaya

Day 2	
09:00-10:00	Prestressing in Tall Buildings: Er. Seelam Prasad
10:00-11:00	Role of Grouted Connections in Precast Construction: Er. Satish Priyadarshan .V
11:00-11:30	Tea Break
11:30-12:30	Use of UHPC for Tall Buildings : Dr. Satish Jain
12:30-13:30	Rapid Precast Large Panel Construction for Tall Buildings: Er. Amit Barde
13:30-14:30	Lunch Break
14:30-15:30	Precasting Concepts for Tall Buildings: Er. Ajit Bhate
15:30-16:00	Tea Break
16:00-17:00	Wind Tunnel Testing: A Solution to Wind Loading on Tall Buildings: Er. Anjana Krishnan
17:00-17:30	Certificate Distribution

Day 2

# Course fee:

(Including GST)

Category	Course fee	Temporary Membership fee	Total Payable
ICI members	₹ 6000.00		₹ 6000.00
Non-members of ICI	₹ 7000.00	₹ 1000.00	₹ 8000.00
ICI student members	₹ 4000.00		₹ 4000.00
Students	₹ 4500.00	₹ 500.00	₹ 5000.00

# Please click the link below to register

https://www.indianconcreteinstitute.org/workshop-registration-form/

ICI Publication "Hand Book on Precast Concrete Buildings" will be given free as complimentary copy for delegates.

Number of Participants is Limited to 50 on first come

first served basis.



# For registration please contact:

#### **Indian Concrete Institute**

Email: indconhq@gmail.com

Phone: 044-24792602, 24795148, 42115996.

Mobile: 9894028542

# **Programme Venue:**

# **Indian Concrete Institute - Technology Centre**

201, First Floor, Ten Square, No. 64, Jawaharlal Nehru Road, Koyambedu, Chennai 600 107. (Close to CMBT Metro Station)

#### Particulars for course fee remittance:

Indian Concrete Institute A/C No. 000101208599 ICICI Bank, Chennai Branch NEFT / IFSC Code : ICIC000001

**Er. R.Radhakrishnan**Secretary General