



## In this issue

### Events

- The 10th International Conference on Concrete under Severe Conditions (CONSEC24) - Environment and Loading held at IIT Madras Research Park on September 25 - 27, 2024

Indian Institute of Technology Madras (IITM), Chennai, India organized the 10th International Conference on Concrete under Severe Conditions (CONSEC24) at its Research Park adjacent to the main campus. The CONSEC conferences focus on the advancements in the areas related to the design, construction, testing, and preservation of various construction materials and systems exposed to severe environmental and loading conditions. Earlier CONSECs were held in Japan (1995), Norway (1998), Canada (2001), South Korea (2004), France (2007), Mexico (2010), China (2013), Italy (2016), and Brazil (2019). Prof. Radhakrishna G. Pillai, Chair, CONSEC24 expresses sincere gratitude to the CONSEC Steering Board for the opportunity to organize the 10th CONSEC conference at Chennai, India.

The faculty members, staff, and students at the Building Technology, Construction Materials and Management (BTCM) group and the Centre of Excellence on Technologies for Low-Carbon and Lean Construction (TLC2) at IITM feels privileged to host the 10th CONSEC with about 400 attendees. The 11 plenary, 18 keynote, 250+ Contributory oral/poster presentations have been invited/peer-reviewed/selected in such a way to provide a single platform for exchanging ideas in both focused and holistic manner for the design, construction and conservation of reinforced concrete structures experiencing severe conditions.

We truly believe that the mix of presentations on the structural and materials engineering concepts were the best part of CONSEC24. Significant efforts have been put in attracting about 300+ co-authors and about 100+ delegates. The significant financial support from the TLC2 Centre and the Office of Global Engagement at IITM and a good number of industrial sponsors was crucial in presenting a great CONSEC24. Also, the support from RILEM, ACI, ICI and AMPP (formerly NACE) in creating awareness about CONSEC24 among their members helped us in attracting this large participation.

Prof. Radhakrishna G Pillai,  
Chair, CONSEC24



# Inaugural session

The conference began with the welcome address by Prof. Benny Raphael, Head of the Civil Engineering Department at IIT Madras. Prof. Nemy Banthia, Chair of the CONSEC Steering Board delivered a short speech on the history of CONSEC conference series and how it was conceptualized in 1995. Prof. Koji Sakai, Founder of the CONSEC Conference Series, gave an insightful talk on “What impacts did the CONSEC concept give on concrete technologies until today?” Prof. Kamakoti, Director, IIT Madras introduced the BTCM Group of Civil Engineering Department to the audience and explained how the Group is actively involved in fostering academia-industry collaboration and simultaneously focusing on the cutting edge research on developing technologies for low-carbon cement production and lean construction practices. Prof. Radhakrishna G Pillai, Chair, CONSEC24 gave a summary of the programs planned for the three-days long CONSEC24 conference to highlight the theme of the conference - bridging structural and material technologies.



Prof. Koji Sakai, Nemy Banthia, V. Kamakoti, Benny Raphael and Radhakrishna Pillai during the inauguration of CONSEC24



BTCM faculty members with Prof. Nemy Banthia and Prof. Koji Sakai during the inauguration of CONSEC24



# Plenary & Keynote Sessions

Renowned academicians and professionals from industry across the globe were invited as the Plenary and Keynote Speakers in CONSEC24. They shared their expertise and knowledge on varied aspects of concrete structures like durability and resilience of reinforced concrete structures subjected to corrosive conditions and chemical attack, Long term performance of concrete, High performance concrete, Durability Modeling, Fatigue and Fracture, Supplementary Cementitious Materials & Alternative Binder Systems.

We are fortunate to have Prof. Surendra P. Shah, one of the foremost global experts in engineering materials, particularly concrete and other cement-based construction, as the plenary speaker. Prof. Shah delivered a talk on “Strategy for Carbon Conscious concrete” and discussed the way forward towards net zero carbon emission.



Glimpse from the plenary & keynote sessions

## Best Poster & Oral Presentation Awards

Around 270+ extended abstracts and full papers were received on broad range of themes aligned with CONSEC conferences like Advanced materials for severe conditions, Lab/field testing and characterisation, Repair and strengthening materials and methods, Damage, deterioration and transport properties, Service life, reliability, sustainability and resilience, Special concretes and construction techniques.

Our sincere thanks to the International Scientific Committee members of CONSEC24 to give their valuable comments and feedback to the authors which help them in improving the quality of the paper as well as the proceedings of CONSEC24. Based on the peer-review, 104 contributory oral presentations and 130+ poster presentations were selected. Best oral and poster presentation awards were assessed based on the technical content, relevance to the CONSEC themes and presentation skills. Prof. Surendra P. Shah and Prof. Sriramy Nair graced the awards ceremony and presented the certificates to the winners.

Best oral presentation award winners are:

- Lupesh Dudi, IIT Delhi, India
- Sudharsan Rathnakumar, University of Illinois Urbana Champaign, USA
- Sreelakshmi Srinivasan, IIT Madras, India



Best poster presentation award winners are:

- Amitkumar Radheyshyam Chauhan, IIT Madras, India
- Deeksha Margapuram, INSA Toulouse, France
- Devjit Acharjee, Jadavpur University, India
- Sumit Singh Thakur, IIT Jammu, India
- G Jyothsna, BITS-PILANI Hyderabad Campus, India
- Anil Kumar Mangalampalli, Mahindra University, India



*Congratulations to the winners!!!*