Dear Readers,

We bring to you the August edition with varied contributions from academia and professionals. This edition is guest edited by Prof. Dinakar Pasala. He is a Professor in Civil Engineering and Dean (Sponsored Research & Industrial Consultancy) at the Indian Institute of Technology (IIT) Bhubaneshwar. He is also the Chairman of the Indian Concrete Institute (ICI), Bhubaneswar Chapter, and is an active consultant to varied industries in the fields of design, repair, rehabilitation, and construction. Durability, corrosion of steel in concrete, and waste utilisation in concrete are his specialized areas, and he has published several papers in several national and international journals to his credit.
Happy Reading!

Production Editor
Indian Concrete Journal

Dear Readers,

The Indian Concrete Journal (ICJ) continues its tradition of delivering high-quality and relevant content for professionals in the field of civil engineering and construction. This edition offers a comprehensive mix of technical papers that cater to both academia and industry professionals.The August 2024 edition of ICJ is a testament to the journal's commitment to advancing knowledge and practice in the field of concrete and construction engineering. It covers a diverse range of topics, from innovative materials to structural analysis.The current edition not only addresses current challenges but also provides innovative solutions, making it an essential resource for professionals seeking to stay ahead in this ever-evolving industry. A quick summary of the papers that were published in this issue is presented here.

The first article by Babanagar *et al.*[1] reviews the significant potential of precast concrete construction (PCC) in addressing India's housing demands. The authors have outlined the benefits of PCC, such as material efficiency, reduced environmental impact, and timely construction. However, they have also highlighted several challenges, including outdated codes, logistical issues, and perception barriers. The paper offers practical solutions and provides case studies, making it a valuable resource for stakeholders looking to adopt PCC.

Authored by Mondal and Bhanja[2] the second technical article presents a detailed comparison of flexural design methods for shear walls. The authors have evaluated idealized and simplified stress-strain relationships of steel as per IRC:112 (2020), providing insights into the practical applications and limitations of each method.

In the third article, Dave and Vora[3] have explored the innovative use of polymethyl methacrylate (PMMA) microcapsules in mortar. Their research demonstrates how these microcapsules can enhance the self-healing properties of concrete, contributing to long-lasting and more resilient structures.

Finally, a collaborative study by Kopuri *et al.*[4] examined the compressive behaviour of concrete-filled double-tube columns in the last technical article of this edition. The authors have employed both experimental and numerical methods to provide a comprehensive understanding of the structural performance of these columns under various loading conditions.

Finally, I would like to convey that articles published in this edition of The ICJ effectively bridge the gap between research and practice, offering valuable insights and practical recommendations. It underscores the importance of continuous learning and adaptation in the face of evolving construction demands and environmental considerations.It is largely owing to the consistent efforts of the editing team and the specialists who were involved that this edition was able successfully compiled. It is my sincere hope that the ICJ will be recognised by professionals as well as academia as a valuable platform for spreading research that goes beyond the boundaries of laboratory settings to have an impact on ground-breaking construction projects. Additionally, the journal publishes special issues that are focussed on topics that are currently of importance or will be of concern in the near future. These issues serve as a resource that brings together materials scientists, engineers, designers, and builders. Readers' comments and opinions on the technical articles and the ICJ in general are extremely valuable to us, and we greatly appreciate them. Your ideas and considerations are greatly anticipated by us.

With Best Regards,

Prof. Dinakar Pasala
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REFERENCES

[1] Babanagar, N., Giriraju, R., Prabhugaonker, R., Gopalaratnam, V., Barde, A., and Pillai, R. G. (2024). "Precast concrete building construction in India - Challenges and opportunities", *The Indian Concrete Journal*, Vol. 98, No. 8, pp. 7-24.

[2] Mondal, A., and Bhanja, S. (2024). "Comparison of flexural design of shear walls using idealised and simplified stress-strain relationships of steel as per IRC: 112 (2020)", *The Indian Concrete Journal*, Vol. 98, No. 8, pp. 25-40.

[3] Vora, R. A., and Dave, U. (2024). "Enhancing mechanical properties of mortar with polymethyl methacrylate (PMMA) microcapsules for self-healing", *The Indian Concrete Journal*, Vol. 98, No. 8, pp. 41-53.

[4] Kopuri, M., N. A. G. K., Priyadharshani, S. A., Jonnikeri, S., Khan, A., Wasay, M., Rashidi, H., and Ahmed, M. (2024). "Experimental and numerical study on compressive behaviour of concrete filled double tube columns", *The Indian Concrete Journal*, Vol. 98, No. 8, pp. 54-63.