EDITORIAL



Dear Readers,

Greetings! In this March-2023 edition of the Indian Concrete Journal (ICJ) we are happy to share with you notes acknowledging our gratitude to the editorial board members, guest editors, and reviewers for their patronage with the ICJ and also four enriching technical papers.

High temperature curing of concrete has been investigated by Najas *et al.*^[1] when fly ash (FA) and ground granulated blastfurnace slag (GGBS) as supplementary cementitious materials (SCMs). Concrete made with FA or GGBS otherwise exhibit slower gain of strength relatively, which can be accelerated by using elevated temperature while curing. An attempt has been made to determine an appropriate temperature range for curing concrete in order to achieve beneficial effects. It is crucial to understand the effects of elevated temperature curing when the SCMs are used in high strength concrete particularly.

Continuing the discussion on elevated temperature curing, Shinde *et al.*^[2] have investigated FA-based geopolymer concrete (GPC). The GPC was cured at ambient temperature instead of elevated temperature in order to study the effects thereof. Empirical relation with varying constants/ coefficients has been proposed for the GPC application at ambient temperature curing conditions, and it is compared with similar practices in different parts of the world, e.g., India, America, Canada, Australia, New Zealand, and Europe.

Discussing further on the GPC, Ramya *et al.*^[3] have proposed multi-response optimization of mechanical properties of GPC made with FA and Alccofine-1203 by using desirability approach - Taguchi Method. Eventually, it has been shown that the proposed optimization helps in achieving desirable properties of the GPC with optimum dosage of Alccofine-1203. The article also promotes the use of green concrete, GPC, involving low carbon emission and reduced water consumption.

In concluding the discussion on elevated temperature curing, Gaude *et al.*^[4] have presented their study on cementitious grout by taking into account temperature conditions. Further, when some admixtures are introduced in the grouts for improving their characteristics, how they affect the grout-mix has been discussed in detail. They suggested to maintain the temperature at the inlet and outlet of the ducts in prestressed concrete be less than 40°C, in order to avoid any adverse effect on strength and durability.

These articles have appropriately highlighted importance of temperature during curing process of cementitious materials and concrete. In addition, optimizing the design mixes, dosages of admixtures, based on the available constituent materials has been presented through these articles. On closing remarks, we are extremely grateful to our editorial board members, guest editors, and reviewers; without their contribution in different capacities, the ICJ would not have achieved its present valued status of being a platform for sharing new knowledge duly meeting the needs of academia and industry together.

Thank you.

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