

FOREWORD



I am happy to write an introductory note/foreword for this edition of the Indian Concrete Journal and take this opportunity to wish you all the very best of health.

Concrete has gone through great changes and that too at an extremely fast pace, and I consider it a privilege to have had an opportunity to be part of some of them, in the last few decades. Journals such as the ICJ, which have a long history have also witnessed and reported on some of them!

With technology seeping into every facet of our lives today, there is much that will continue to evolve, and the area of construction materials and their use is no exception. Use of different admixtures in concrete and a better understanding of the hydration process has given us a tremendous opportunity in developing new cementitious materials with emphasis on durability, economy and sustainability.

Across the world, professional bodies and different stakeholders have joined hands and worked together to achieve excellence in development of appropriate tools for research and dissemination of results through a rigorous peer review. India is no exception and journals such as the ICJ have a very important responsibility in this regard. Though cement science recognizes no barriers, its application in different parts of the world needs to be done keeping in mind the local conditions. In fact this recognition should guide further research and create interesting breakthroughs.

I would also like to emphasize the multi-disciplinary nature of research in the area of cementitious construction materials and ask the Indian concrete fraternity to keep this in mind while they work to better understand cement and concrete. Development of appropriate test methods to measure precisely and reliably is yet another area that requires careful attention. I must also emphasise the importance of team-work in creating and using good quality construction material – it simply cannot be an individual effort. All stakeholders – academicians, cement manufacturers, construction agencies, and professional bodies need to understand each other's strengths and weaknesses, and work together. I have tried to follow these simple rules in my work and have never been disappointed by the results. They held me in very good stead as I worked through different projects across the world.

I hope you will enjoy this present special edition with papers highlighting both the rigorous research and the need for understanding of principles such as productivity and construction engineering, giving a glimpse of the diversity in the field of development and applications of cementitious construction materials.

Best Regards,
Surendra P. Shah

About :

Dr. Surendra Shah is a Presidential Distinguished Professor at University of Texas at Arlington, and Walter P. Murphy Professor of Civil Engineering at Northwestern University (emeritus). He was the founding director of the pioneering National Science Foundation Science and Technology Center for Advanced Cement-Based Materials. He is also a Distinguished Professor of IIT Madras. His current research interests include fracture, fiber reinforced composites, non-destructive evaluation, transport properties, processing, rheology, nanotechnology and use of solid waste materials. He has co-authored books and published more than 500 journal articles and these have exemplary statistics to share a few (from Google Scholar) - 72000 citations, with an h-index of 127 and I10 index of 120; and has more than 20 books edited. He is past editor-in-chief of RILEM's Materials and Structures journal.

Dr. Shah is a member of the National Academy of Engineering and a foreign member of the Chinese Academy of Engineering and the Indian Academy of Engineering. He is the only civil engineer who is a member of these three academies. Further, he is member of the (US) National Academy of Inventors and Foreign Member of the Russian Academy of Engineering. His work has been recognised extensively and he has received several awards.