

Lecture 5.38: Modern trends and research in concrete technology, relevant journals and inst...

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. Modern trends and research in concrete technology, relevant journals and institutes.
- 2. Summary and Q&A

5.3 Modern trends and research in concrete t...

- Modern trends heavily focus on sustainability: Green concrete, geopolymer concrete (zero cement).
- Nano-technology in concrete: Using nano-silica to achieve ultra-high performance and densification.
- 3D Printed Concrete: Automated extrusion for rapid, formwork-free construction of complex geometries.
- Smart Concrete: Embedded sensors or conductive fibers for structural health monitoring.
- Prominent research institutes: ACI, RILEM, CSIR-CBRI, and Indian Concrete Institute (ICI).

Summary

- Recap of the specific material properties and methods discussed.
- Always refer back to the standard IS codes for parameter limits.