

Lecture 5.34: Admixtures in concrete: Purpose, properties and application for different typ...

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. Admixtures in concrete: Purpose, properties and application for different types of admixture such as accelerators, retarders, water reducing admixtures, air entraining agents and super plasticizers.
- 2. Summary and Q&A

5.1 Admixtures in concrete: Purpose, propert...

- Admixtures: Chemicals added before or during mixing to modify concrete properties.
- Accelerators (e.g., Calcium Chloride): Speed up setting time and early strength; used in cold weather.
- Retarders (e.g., Sugar, Gypsum): Delay setting time; used in hot weather or long hauls.
- Water Reducing Admixtures (Plasticizers): Increase workability without adding water.
- Air Entraining Agents: Introduce microscopic air bubbles to resist freezing and thawing cycles.

Summary

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