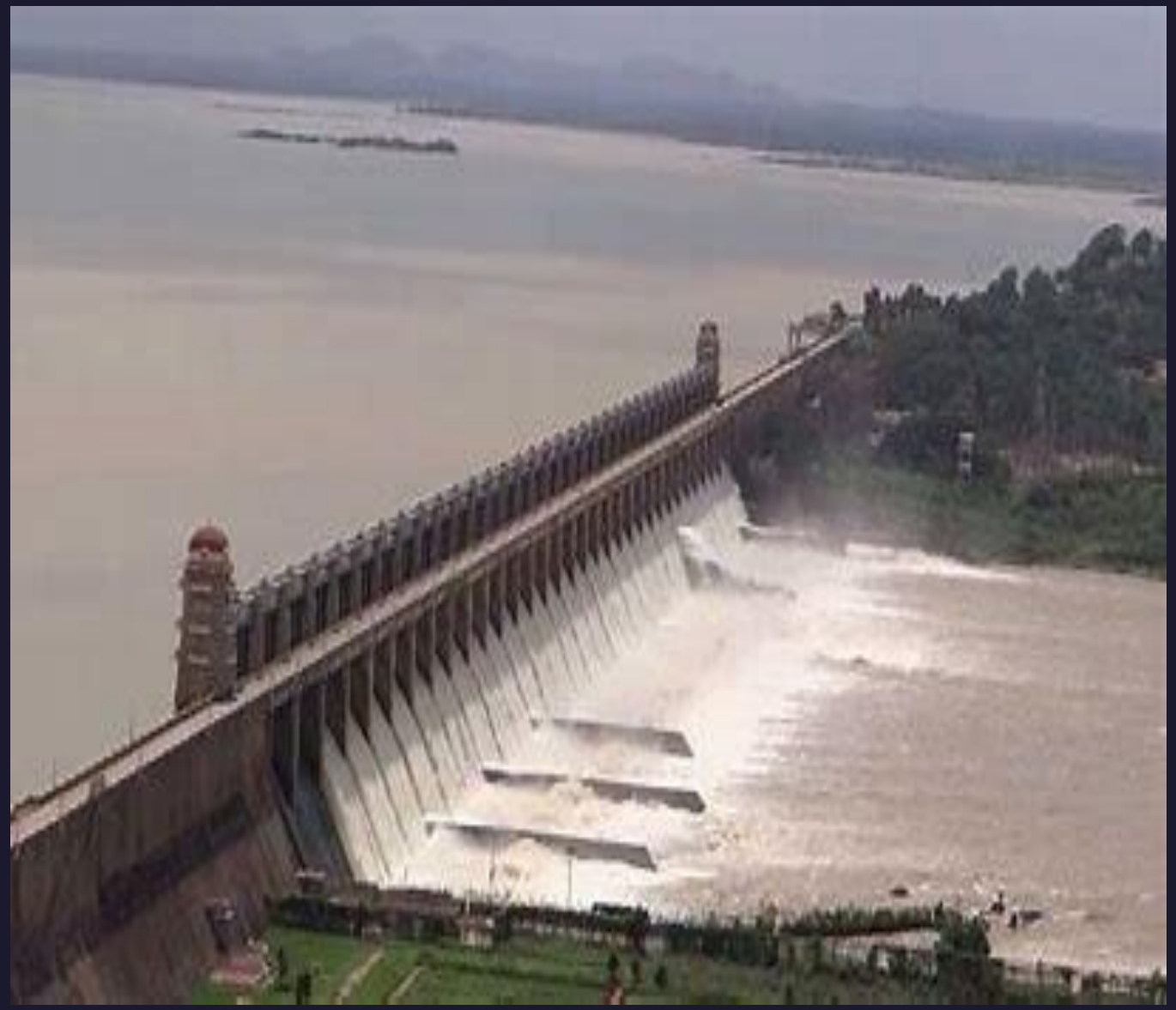


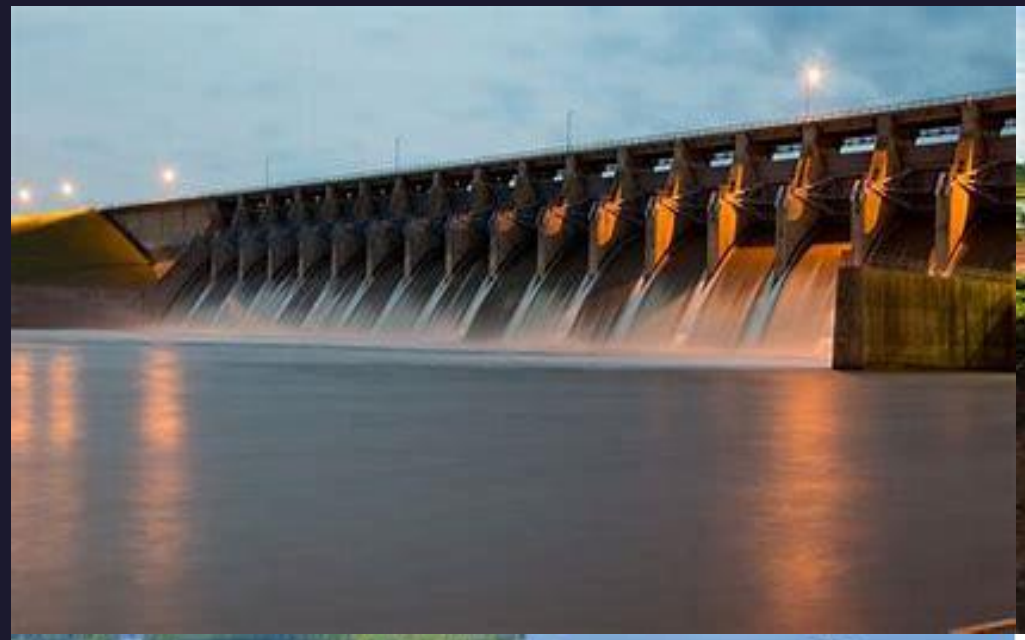
ICI Seminar on Waterproofing Systems for Underwater Constructions

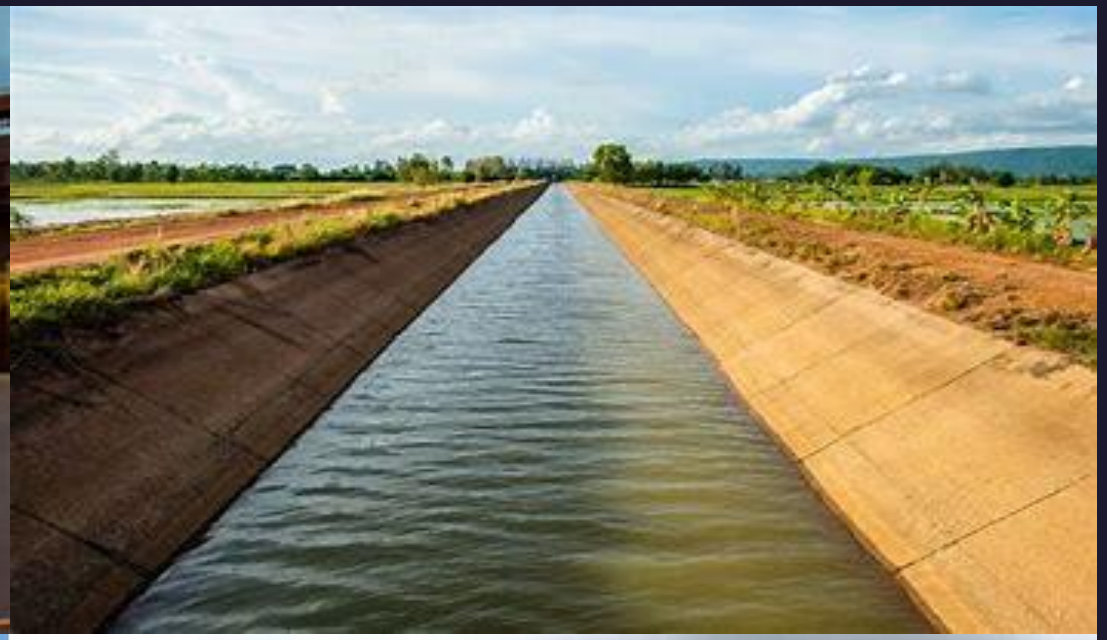
Chandrashekar Sharma

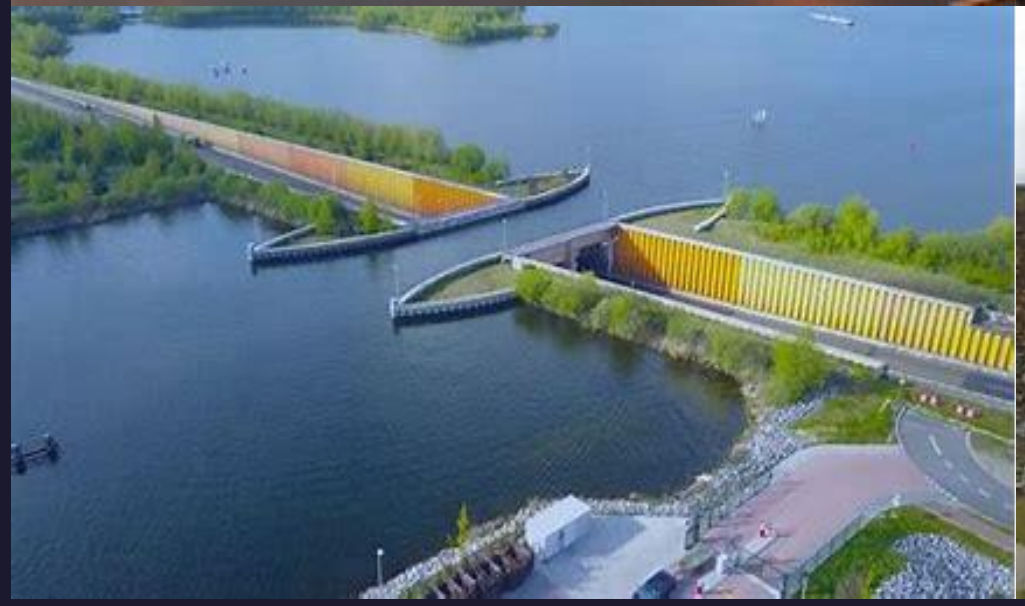
Technical Manager-Refurbishment

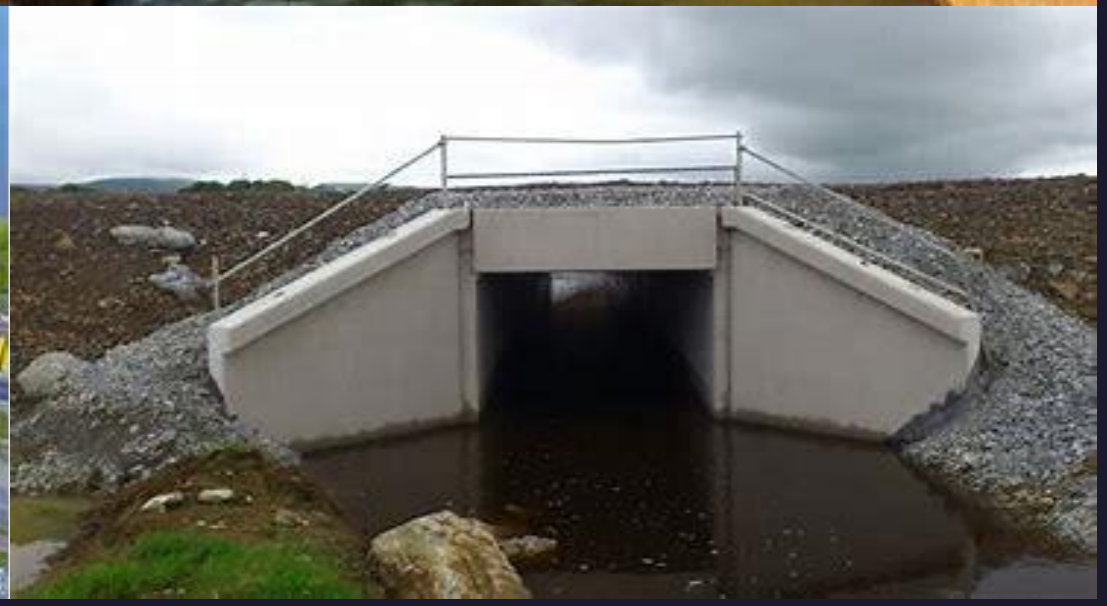
MC BAUCHEMIE INDIA P LTD.

Underwater Civil Engineering Infrastructures- Hydraulic Structures

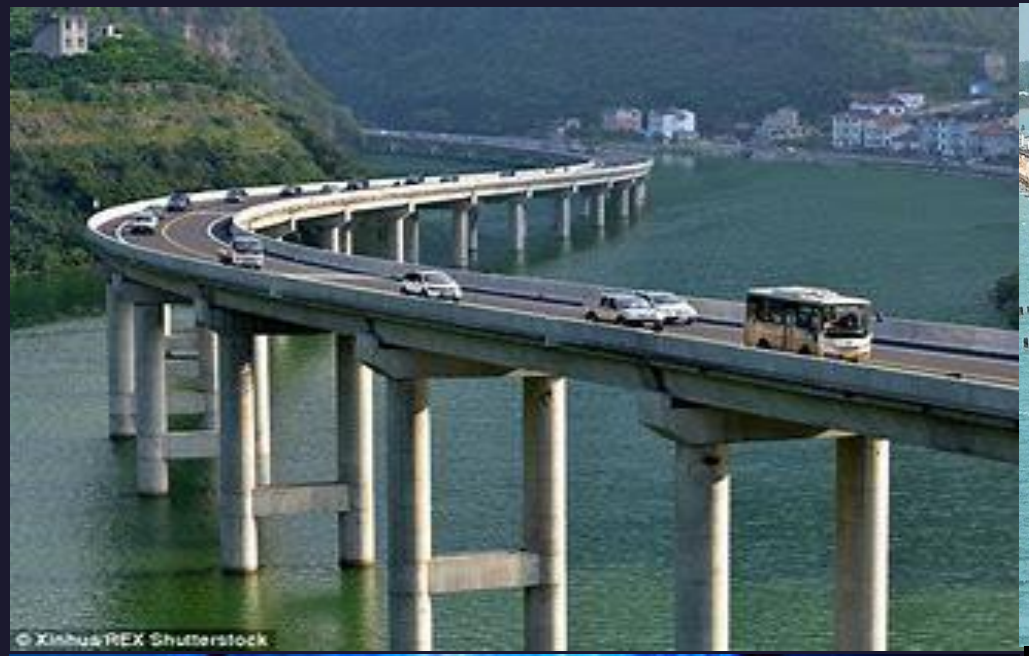


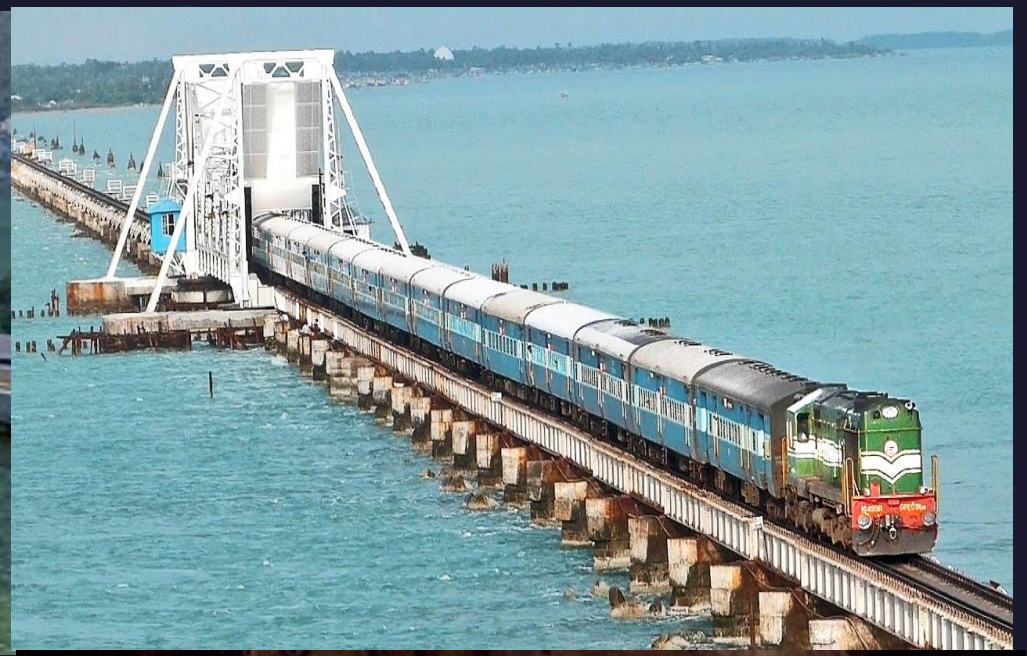


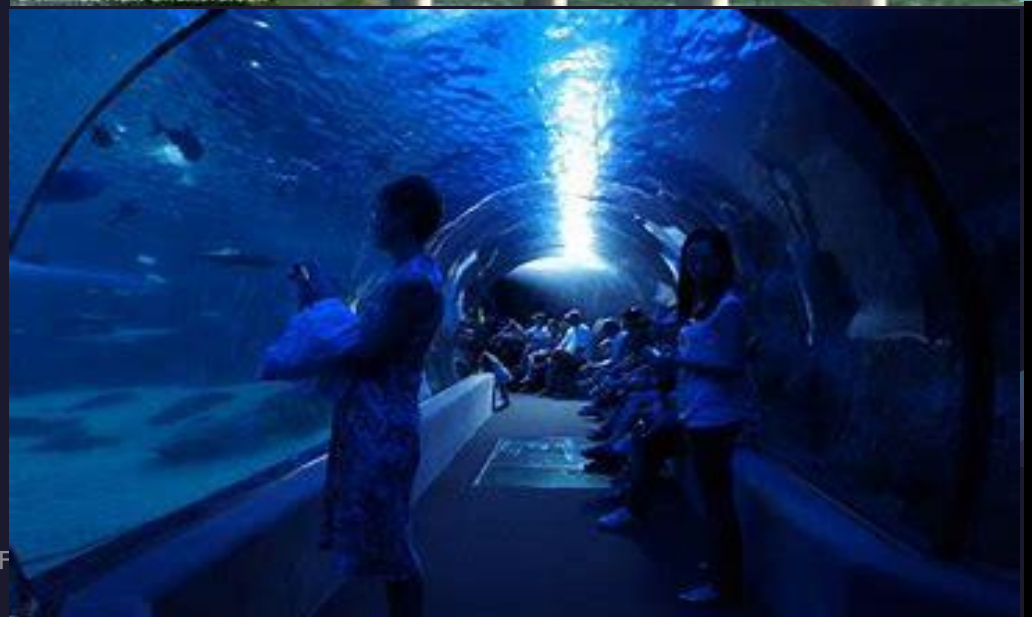


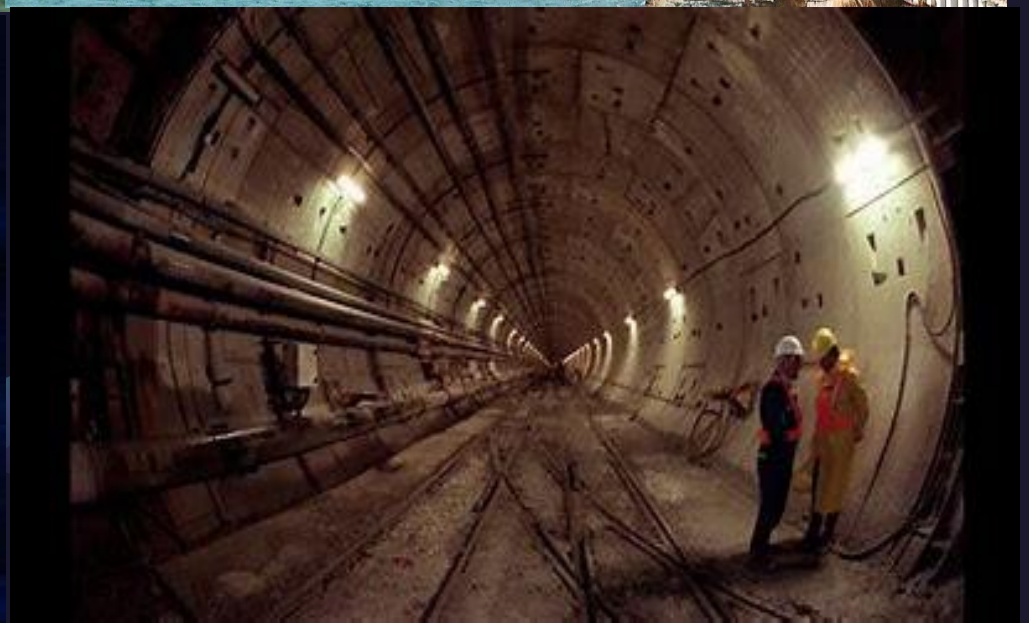


Underwater Civil Engineering Infrastructures- Transportation Structures









Underwater Civil Engineering Infrastructures – Marine Structures

Need for Waterproofing of Underwater RCC Structures

- To prevent loss of water joints / cracks /voids /honeycombs
- To prevent Corrosion of rebars and enhance durability
- To prevent ingress of aggressive chemicals- chlorides /sulphates
- To prevent pollution and disaster and hence loss of life and property
- To prevent ingress of water causing loss of life and property

Waterproofing Materials / Solutions for Underwater RCC Structures

- Low Viscous PU Injection Grouting
- Moisture insensitive low viscous epoxy injection grouting
- Underwater Cementitious Grouts /Microconcretes /Mortars
- Underwater Epoxy Grouts /Mortars
- Swellable Water Bars
- Moisture Insensitive Sealants
- Use of supplementary cementitious materials- flyash /slag /microsilica to produce high performance .Watertight concrete
- Hydrophobic pore blocking admixtures

Performance Properties of Underwater Waterproofing Materials

- Resistance to Hydro static and Hydro dynamic pressure
- Dimensional Stability under water
- Low viscous, flexible and elastomeric
- High Compressive, Flexural and Tensile Strengths
- Flowability, Pumpability and self compacting /levelling
- Bond Strength
- Non shrink
- Chemical Resistance
- Non Toxic
- Economical

THANK YOU