

## **Impact of Technology on Society**

CSIR-CBRI developed Interpenetrating Polymer Network (IPN) epoxy based coatings. These coatings exhibit improved properties in comparison to the conventional coatings such as low permeability, sufficient elongation, improved flexibility, higher bond strength with the concrete and excellent chemical resistance. Keeping in view these desired features of the coating, CSIR-CBRI recommends its use for the protection of different types of R.C.C. structures exposed to saline/aggressive environments such as: Bridges, Flyovers, Jetties, Marine Structures; Fertilizer plants: Urea & NPK Bagging Plants, Prilling Towers, Cooling Towers; Chimneys, Belt conveyor structures, Building Structures and various industrial structures.

Specifications of the IPN coating are included in the Current Schedule of Rates (CSR) and Manuals of Indian Railways. Several papers have been published in reputed journals and presented in Conferences related to this Technology.

The coating has been applied on several important structures throughout the country and shown excellent performance. The impact of IPN coatings on society is substantial and far-reaching. Besides enhancing the service life of the structures, this innovative material brings numerous benefits and advancements that positively influence various aspects of our lives.