

Report on

Expert talk on “Role of Construction Chemicals, with focus on Concrete Repair Systems”

Department of Civil Engineering, GCET had organized an expert talk on “Role of Construction Chemicals, with focus on Concrete Repair Systems” on 05th September, 2020 by Mr. Hiren Shah, Business Development Manager (West Region) for Refurbishment Product Segment & as Key Project Manager – Wind Energy, Sika India Private Ltd (a subsidiary of Sika AG). The expert talk was organized for 2nd, 3rd & 4th year civil engineering students.

AIM:

The main aim of the expert talk was to aware the students about basics of repair and rehabilitation of the concrete structures in the construction industry.

About the Speaker:

Mr. Hiren Shah is a Chemical Engineer from Pune University & Post Graduate in Marketing from Gujarat University. He is having 16+ years of professional experience; out of which 14 years is into construction Chemicals. He has worked in various domains like Sales, Business Development, Marketing, Key Account Management & Technical support. Concrete Repairs & Waterproofing are his areas of expertise.

About the Talk:

Mr. Hiren Shah delivered the lecture on Role of Construction Chemicals, with focus on Concrete Repair Systems. He explained the deterioration in concrete structures, various types of defects in the structure, how to analyze it, and various tests to be carried out for finding the causes of defects. He explained various chemical tests such as acid attack, carbonation test, chloride test in detail. He focused on corrosion of concrete structures, chemical equations of it, causes of corrosion and how to control corrosion.

He explained different types of materials used for repairing. He explained the main difference between repairs and rehabilitation of structures. He also focused on characteristics of the repair materials, how to measure the crack using various instruments, various cement based repair materials, various polypropylene based repair materials, and how to increase the durability of the structures.

Mr. Hiren Shah also explained the method of injection of repair materials through the videos. He covered shotcrete, grouting, Ferro cement and various application methods in detail through videos. He covered deficiencies in structure requiring seismic retrofit, Design Philosophy and technics to enhance the structures.