



**MOTHER TERESA**  
**INSTITUTE OF SCIENCE AND TECHNOLOGY**  
Approved by AICTE, Govt. of Telangana , Affiliated to JNTUH & SBTET, Hyderabad  
Recognition under Section 2(f) & 12 (B) of the UGC Act, 1956  
SANKETIKA NAGAR, KOTHURU (V), SATHUPALLY – 507303, KHAMMAM Dist., TELANGANA  
Phone : 9494641251, Email ID : info@mistech.ac.in



**DEPARTMENT OF CIVIL ENGINEERING**

**ACADEMIC YEAR: 2021-22**

**A SUMMARY REPORT**

**Course Name:** CONCRETE TECHNOLOGY

**Name of the Resource Person:** Mr.G.Hathiram, Head of the Department, KLR College,  
Bhadradi Kothagudem (Dist),Palwancha.

**Gap Identified:** Shotcrete technology, Self-healing concrete, and Slurry-infiltrated fibrous  
Concrete (sifcon).

**No. of Students attended:** 38 members

**Summary:** On the day of the session (i.e 05-10-2021) Mr.G.Hathiram, Head Of The Department, KLR College, Bhadradi Kothagudem (Dist),Palwancha. Delivered a lecture on the basics of Introduction to the course of Shotcrete is a mortar or high performance concrete conveyed through a hose and pneumatically projected at high velocity onto a backing surface. It is the force of this spraying action that leads to compaction of the concrete or mortar which then forms layers of concrete to the required thickness .Shotcreting has proved to be the best method for construction of curved surfaces. Tunnellinings and domes are now much easier to construct with the advent of with shotcrete technology. Shotcrete is a widely accepted and used way of placing material that is cementitious in nature for a vast variety of applications.



Self-healing concrete is a new type of concrete. It imitates the automatic healing of body wounds by the secretion of some kind of material. To create self-healing concrete, some special materials (such as fibers or capsules), which contain some adhesive liquids, are dispensed into the concrete mix. When cracks happen, the fibers or capsules will break and the liquid contained in them will then heal the crack at once. However, self-healing concrete is only at the research stage. Its application in the concrete industry is still some way off.

Slurry-infiltrated fibrous concrete (SIFCON) can be considered as a special type of fiber concrete with high fiber content. The matrix usually consists of cement slurry or flowing mortar. SIFCON has excellent potential for application in areas where high ductility and resistance to impact are needed. Only very limited information is available about its behavior under different types of loading.