



DEPARTMENT OF CIVIL ENGINEERING
ACADEMIC YEAR 2020-2021/EVEN
INTERNAL STAFF SEMINAR – REPORT

29/01/2021

Background & Objective

Department of Civil Engineering had organized an Internal Seminar for the Department staff members for accessing online journals. The purpose of this seminar is to equip the faculty in new techniques through accessing online journals (MAT journal).

Seminar Session

A Seminar was held in the Department of Civil Engineering on 29th January, 2021 at 01:00PM. The seminar was presided over by **Ms.R.Revathi, HoD.**, Department of Civil Engineering. All the faculties were present in the seminar. **Mr.K.Arun /AP** delivered his seminar talk on **“USE OF BAMBOO AS A CONSTRUCTION MATERIAL - A REVIEW”**



Seminar talk by Mr.K.Arun /AP

Theme: Researchers and architects are always looking for new materials for basic frameworks; utilizing bamboo as conceivable support has picked up fame. Giant bamboos are the largest members of the grass family. In bamboo, the intermodal regions of the stem are usually hollow and the vascular bundles in the cross section are scattered throughout the stem instead of in a

cylindrical arrangement. Bamboo includes some of the fastest growing plants in the world. Certain species of bamboo can grow 91cm within a 24 hour period. Bamboo culms are a cylindrical shell divided by solid transversal diaphragms at nodes and have some intriguing properties such as high strength in the direction parallel to the fibers, which run longitudinally along the length of the column, and low strength in a direction perpendicular to the fibers. Based on the different properties and characteristics of bamboo, it was concluded that Bamboo can potentially be used as substitute for steel reinforcement. Considering its credibility, there is a wide scope for designing multi story building using bamboo reinforcement in future.

Outcome :

The Seminar clearly highlighted the properties and characteristics of bamboo as an alternate material for building construction. Staff Members also got an idea about the usage of bamboo in construction industry like columns, beams, purlins, rafters & reapers, flooring, doors & windows, walls, ceiling, man-hole covers etc. This seminar proves to be effective in such a way that, it highlighted the potential replacement for steel reinforcement. Also this seminar provided the wide scope for designing multi story building using bamboo reinforcement in future, considering the credibility of bamboo. Finally, discussions were made among faculty members in various features of bamboo as a construction material. Staff members shared their views regarding seminar and gave their valuable feedback.