

**Veermata Jijabai Technological Institute**

**Matunga, Mumbai - 400019**

**Civil and Environmental Engineering Department**

**Brief report on**

**“Indian Concrete Institute (I.C.I.) - VJTI Student Chapter”**

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**VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE**

**(V.J.T.I.)**

**MATUNGA, MUMBAI – 400 019**

**Civil and Environmental Engineering Department**



Indian Concrete Institute

**Indian Concrete Institution  
( I C I ) –V J T I Student Chapter**

**Industry-Institution-Interaction  
Expert Lecture  
On**

## **“ Low Carbon Construction”**

**by**

**Mr. Vijay Kulkarni**

**( Ex. President, Indian Concrete Institution)**

**ON**

**Tuesday 24<sup>th</sup> January 2023**

**Time: 2.30 PM Onwards**

**Venue: Civil Seminar Hall**

### **Organising Committee**

**Dr Sumedh Mhaske**  
Mentor, ICI- VJTI Student  
Chapter

**Dr Abhaykumar Wayal**  
Head, Civil and Env Engg dept

**Dr Vishal Thombare**  
Chairman  
ICI Mumbai Chapter

**Mr Pravin Chaudhari** (Assistant Prof., VJTI)  
**Mr. Chetan Bhole** (Lecturer, VJTI)

## “Indian Concrete Institute (I.C.I.) – VJTI Student Chapter”

Veermata Jijabai Technological Institute, Civil and Environmental Engineering Department in collaboration with Indian Concrete Institute (I.C.I.) inaugurated a student chapter on Tuesday 24<sup>th</sup> of January 2023



### Inauguration of ICI – VJTI student chapter

Honourable Chief Guest Mr. Vijaykumar R. Kulkarni (ICI Mumbai Chapter) were welcomed by Dr. Sumedh Mhaske and Dr. Abhaykumar Wayal.



## **About Low carbon construction:**

Low carbon is a term applied to an economy, industry, product or activity to describe the relatively low amount of carbon dioxide generated by it over a specific time.

Carbon-dioxide from vehicle exhausts, manufacturing, construction, heating and cooling etc, accumulates in the atmosphere contributing to the greenhouse effect and consequently climate change. It is for this reason that achieving a low-carbon economy has become an objective for many countries, regions, businesses and individuals.

Being low-carbon (or decarbonised) essentially requires reducing the direct use of fossil fuels – coal, gas and oil – and also, activities which rely indirectly on fossil fuels, such as cooking and washing, which usually require gas or electricity generated at power stations using fossil fuels (e.g coal and oil).





Dr Sumedh Mhaske invited Mr. Vijay Kulkarni (ICI Mumbai chapter) to share few words and give information about low carbon construction – VJTI student Chapter


### **Objectives of Low carbon construction:**

- Reducing energy demand by improving energy efficiency.
- Use of Renewable sources to cater to the Operation energy requirements.
- Reducing Embodied carbon stored in building materials.
- To promote growth of concrete construction and its sub-specializations.

### **Strategies to reduce carbon:**

- Use of AI technique.
- Mass concrete (large scope for carbon footprint reduction).
- Specify long service life.
- Use HSC/HPC (HSC saves concrete and steel).
- R&D works in carbon mitigation.
- Mitigation commitments by professional bodies. ( shown in below picture).

## Mitigation Commitments by Professional Bodies



- Reducing Operational Carbon from New Buildings to zero by 2030
- Reducing both Operational and Embodied Carbon from all Buildings to net zero by 2050



Dr Sumedh Mhaske (Mentor) sharing few words about low carbon construction- VJTI Student Chapter



Mr. Vijay Kulkarni offering low carbon manual to Dr. Sumedh Mhaske



(Dr. A.S Wayal sharing few words on Carbon construction)



(A group photo after interaction on low carbon construction with M.tech Construction Management students and M.tech Environmental engineering students)