

## **School of Architecture**

### **Report on Bamboo workshop at IPIRTI**

### **INDUSTRY INTEGRATED LEARNING** **(Hands on Experience with bamboo)**

**Faculty coordinator:** Ar. Kinjal Sheth , Er. Nagaraja

**Activity:** Bamboo Workshop

**Venue:** IPIRTI Bengaluru Campus

**Program coordinator:** Mr. Amitava Sil, Scientist and Head IPIRTI Field Station Kolkata

**Date:** .06.09.2022 to 07.09.2022

No. of Students: 25

**About the Event/Activity:** School of Architecture, REVA University organized two days' workshop "Understanding with Bamboo" at IPIRTI – Indian Plywood Industries Research & Training Institute, Bangalore to promote the research and skill development in bamboo structures.

As a part of MOU, IPIRTI may organize various activities including research funded projects, workshops, seminars and conferences in the field of bamboo. We as School of Architecture enhance our knowledge on bamboo construction and facilitate students by collaborating with IPIRTI. We conducted the workshop for our students from 7<sup>th</sup> semester SDL course.

We would like to thank our Director, Prof. Vidya Srikanth for her immense support in encouraging such initiatives.

#### **About the Program:**

Bamboo is an eco-friendly natural resource known for its rapid growth. Students will receive knowledge and skills as well as awareness of and practice in utilizing technologies that use bamboo, possibly in combination with other materials, and that help to conserve the environment. To become expert craftsman, confident in manifesting your design and ideas using bamboo as a material.

#### **Objectives of the program:**

- Learning how to use bamboo as a material
- To provide exposure to various tools and techniques for bamboo construction.
- Providing awareness on various standards and codes for use bamboo as structural and nonstructural elements
- Providing exposure on treatment process of bamboo to enhance durability

- Hands-On Experience – making bamboo truss.
- Learning cutting, joineries and splitting of Bamboo

Program schedule is attached with this report for reference.







Two-Day Workshop on "Understanding of Bamboo" from 6<sup>th</sup> to 7<sup>th</sup> September, 2022 at IPIRTI Bangalore

**Program Schedule**

**Day 1: 6<sup>th</sup> September, 2022**

**Opening Session:**  
09:30 am – 11:00 am  
Moderator: Shri Rameshwar V R

09:30 am – 10:00 am	Registration	Mr. Chidambaram
10:00 am – 10:30 am	Welcome Address	Dr. Suresh Singh Choudhary, Director, IPIRTI
10:30 am – 10:45 am	A round of self-introduction	
10:45 am – 11:00 am	Bamboo and its properties	Shri. Anurag S, Scientist, IPIRTI
11:00 am – 11:15 am	Potential of Bamboo as a wood substitute	Dr. Viji Kanna Chandra, Scientist, IPIRTI
11:15 am – 11:25 am	<b>Tea Break</b>	
<b>Session I (Theory):</b> 11:25 am – 01:00 pm Moderator: Mr. Gargi Mathy		
11:25 am – 12:15 pm	Bamboo – Culture, Purification, Joinery, Connections	Shri. Rameshwar V R, Scientist, IPIRTI
12:15 pm – 01:00 pm	Bamboo Harvesting Techniques	Shri. Anurag S, Scientist, IPIRTI
01:00 pm – 02:00 pm	<b>Lunch Break</b>	
<b>Session II (Lab – Carpentry):</b> 2:30 pm – 5:30 pm		
<b>Prata Session</b>		
02:30 pm – 05:30 pm	Working with bamboo, Tools, Joint types, Connections, Making Bamboo Truss	Shri. Anurag S, Scientist, IPIRTI & Shri. Rameshwar V R, Scientist, IPIRTI

4

Day 2: 7 <sup>th</sup> September 2022		
Session III (Theory & Practical) 09:30 am – 01:00 pm Moderator: Ms. Gargi Mathy		
09:30 am – 10:30 am	Treatment Process of Bamboo and its Standards (JIS and Cold process, drying process, Boilachore process, wood injection process)	Dr. Rashmi Shrivastava Scientist, IPIRTI
10:30 am – 10:45 am	<b>Tea Break</b>	
10:45 am – 01:00 pm	Lab Testing of Bamboo and Visit to Model Bamboo House	Shri. Anurag S Scientist, IPIRTI & Shri. Rameshwar V R Scientist, IPIRTI
01:00 pm – 02:00 pm	<b>Lunch Break</b>	
Session IV (Field Demonstration) 1:45 pm – 5:30 pm		
02:00 pm – 04:00 pm	Field demonstration of bamboo treatment operation	Dr. Rashmi Shrivastava Scientist, IPIRTI & Shri. Anurag S Scientist, IPIRTI
04:00 pm – 04:30 pm	Take away from the workshop	Shri. Anurag S Scientist, IPIRTI & Shri. Rameshwar V R Scientist, IPIRTI
04:30 pm – 05:30 pm	Distribution of Certificates	Director and Joint Director, IPIRTI