

31st Annual Meeting of ISO/TC165 (Timber Structures) WG12 (Structural Uses of Bamboo) Meeting

5-8th September, 2017
Vienna, Austria

The 31st Annual meeting of ISO/TC165 was held from 5 to 8 September 2017 in Vienna, Austria. More than 40 timber or bamboo experts attended the meeting from Austria, Canada, Colombia, China, Egypt, Finland, Germany, Japan, Malaysia, Netherlands, Korea, UK, USA as well as representatives from liaison organizations like INBAR (International Organization for Bamboo and Rattan) and SBS (Small Business Standards). INBAR is the convener of WG12 and is responsible for revising two existing standards while concurrently helping develop one new standard for the structural uses of bamboo. [Read More](#)

Standardisation of Engineered Bamboo

International Standardisation Work of Engineered Bamboo Materials

Texts and photo provided by **Arjan van der Vegte**

Since the 1990s, industrially produced engineered bamboo products like bamboo flooring have been developed and introduced to the international market. Many of these engineered products are developed for use in buildings. Recently, engineered bamboo is being used increasingly for external features of buildings, as well as interior decoration. This has boosted the demand for engineered bamboo products.



Madrid Airport
Source: Moso

In response to this need, in September the INBAR Task Force for Structural use of bamboo presented a request for ISO TC 165 to develop a standard "Structural Uses of Laminated Bamboo – Physical and Mechanical testing". ISO TC 165 supports this plan. Experts from INBAR's Task Force [**Bhavna Sharma** (University of Bath) and **Arjan van der Vegte** (Moso International BV)] will work to develop this ISO standard. [Read More](#)

Standardisation Work of Engineered Bamboo Structures in China

Text by **Leng Yubing & Xu Qingfeng**

Shanghai Research Institute of Building Sciences (SRIBS) is now taking the lead in creating the technical specifications for engineered bamboo structures. This design guide is supported (and will be utilised) by the China Association for Engineering Construction Standardization (CECS). This standard will offer provisions for material selection, material properties, the designing of components and connections, constructional requirements, as well as structural operations and maintenance. Corrosion and fire resistance and the corresponding protective measurements are the primary objectives of this standard. The specification also seeks to develop advanced and standardized production techniques to reduce manufacturing costs. Moreover, SRIBS is applying to prepare another two technical specifications that address the testing methods and acceptance of constructional quality of engineered bamboo structures.

Research

A New Pre-fabricated Engineered Bamboo House

Information provided by **Chen Fuming & Wang Ge**

A new pre-fabricated engineered bamboo house design in China hopes to set the tone for future green construction.

The house design, which was managed by INBAR's long-term partner the International Centre for Bamboo and Rattan (ICBR), uses lightweight steel frames as load-bearing components, with bamboo-based panels as building enclosures, such as walls and roofs. The walls and roofs of houses have a sandwiched structure, using the laminated bamboo fiber bundle and wood veneer composite material for exterior surface panels, and bamboo OSB for interior surface panels. The middle layer between exterior and interior panels is filled with 10mm thickness of rock wool for sound and heat insulation. [Read More](#)



Upcoming Events



International Conference on Non-Conventional Materials and Technologies: Construction for Sustainability; Green Composite Materials and Technologies (IC-NOCMAT 2017)

Date: 26-29th November, 2017

Venue: Yucatán, México



The Global Bamboo and Rattan Congress (BARC 2018)

Date: 25-27th June, 2018

Venue: Beijing, China



11th World Bamboo Congress (WBC)

Date: 14-18th August, 2018

Venue: Xalapa, Veracruz, Mexico

New Key Experts



Mateo Gutierrez Gonzalez



Andry Widjowijatnoko

Recently two new key experts joined **INBAR's Construction Task Force** - Mr. **Mateo Gutierrez Gonzalez** (structural engineer) University of Queensland, Australia and Mr. **Andry Widjowijatnoko** (architect) Institut Tekno-logi Bandung, Indonesia. Both of them have a number of years of bamboo construction experience. If you are interested in joining the task force, please follow the steps mentioned in "How to become a key expert of INBAR Construction Task Force".



Publications

Bamboou Test Kit in a Back Pack in French

Authors: **Kent Harries & Rebecca Glucksman**



The French version of Users' Manual of Bamboou Test Kit in a Back Pack was published recently. They

are presently available in five languages (**English, Spanish, Chinese, Portuguese** and **French**) on INBAR's website.

Consultancy Services of INBAR Construction Task Force

CRS-INBAR Project Bamboo for Shelter Construction in Odisha State, India

The state of Odisha has often faced numerous challenges on account of it being frequently impacted by flooding, cyclones and monsoon rains which in turn recurrently causes widespread damage to shelters. CRS (Catholic Relief Services) recently commissioned INBAR to conduct a study on bamboo shelters in this State, with the aim of understanding the feasibility of using locally available bamboo for shelter construction, and to recommend strategies and approaches to improve bamboo shelters in both post-disaster and long term development context. Experts who are a part of INBAR's Construction Task Force (**Sebastian Kamiski & Andrew Lawrence**) carried out a field visit in July and have recently completed the decision-making guide. [Read More](#)



Journal

Hector F. Archila, Andrew Rhead, Martin P. Ansell, Peter Walker, Juan L. Marriaga. Elastic response of cross-laminated engineered bamboo panels subjected to in-plane loading. ICE Publishing, 2017. [Link](#)

To read previous INBAR's Construction Task Force newsletter - 2016Q3 2017Q1

All the information above is provided by the key experts of **INBAR Construction Task Force** and INBAR's partners
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