



Following the successful Symposia held in Pittsburgh (May 2016) and Winnipeg (August 2015), the third Bamboo in the Urban Environment Symposium was held on 7-9 March 2017 in Bogor, Indonesia, just outside Jakarta. The Symposia series was supported as part of a US-State Department and UK British Council-funded Global Innovation Initiative (GII) project that is supporting the development of bamboo as a sustainable and engineered alternative construction material. The group focuses on the use of bamboo in developing regions where bamboo is a more sustainable, economical and structurally-sound construction material. The Jakarta meeting, which brought together academic, private sector and civil society actors from 15 countries and territories, was jointly organized by the University of Pittsburgh - Swanson School of Engineering, Bogor Agricultural University, Coventry University, and the International Bamboo and Rattan Organization (INBAR), a multilateral organization with 42 member states. [Read More](#)

Highlights of Jakarta Meeting

The meeting saw strong engagement and commitment from **Indonesia**, with stakeholders from 8 new institutions joining the symposium series. Speaking on behalf of the Government of Indonesia, Prof. Bambang Prastia, Head of the Indonesian Standards Agency, in his keynote address stated that Indonesia is paying high attention to develop bamboo for the construction sector as part of a broader strategy to standardize and build the bamboo industry.

The meeting constituted five technical standards meetings and over twenty high quality technical presentations (**2017 Symposium Presentations**) contributed by the approximately 30 invited delegates. The 2016 **'Pittsburgh Declaration'** was unanimously reaffirmed at the closing section with new delegates signing on to this important global



Opening of Symposium

Upcoming Events



Bamboost

Date: 24-25 April, 2017

Venue: Wageningen, the Netherlands

The Bamboo conference will combine the broad expertise of industry and knowledge institutes to cover the state of the art and the latest innovation and design trends relevant to bamboo utilisation. This conference will focus on developments in technology for biorefinery of bamboo and the new opportunities this creates. It will also address important bamboo applications for food, health products, textiles and construction materials.

2nd Annual Meeting of ISO/TC296 (Bamboo and Rattan)

Date: 22-24 August, 2017

Venue: Jakarta, Indonesia

31st Annual Meeting of ISO/TC165 & WG12 meeting

Date: 5-8 September, 2017

Venue: Vienna, Austria

During the 31st Annual Meeting of ISO/TC165 (Timber Structure), Working Group 12 (Structural Use of Bamboo, WG12) will convene more than 10 bamboo construction experts from around the world to revise two existing standards (ISO22157-1 & ISO22156) for round pole bamboo structure and develop one new standard for bamboo grading. WebEx has now been integrated into the meeting systems and this will help participants to join the meeting remotely.

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

11th World Bamboo Congress

Date: August, 2018

Venue: Xalapa, Veracruz, Mexico

Awards



Laminated Bamboo Research Implemented by Haitao Li

Dr. Haitao Li, Associate professor of the Nanjing Forestry University as well as one of the key experts of INBAR Construction Task Force, was awarded by the 6th Liang Xi Youth Paper Award in September 2016 in China for his research paper "Mechanical Performance of Laminated Bamboo Column under Axial Compression". He was also conferred with provincial award in June 2016 for his researches on mechanical properties of constitutive model and key components of laminated bamboo.

Key Experts



Recently 2 new Key experts joined INBAR's Construction Task Force. Both Mr. **Martin Tam** from Hong Kong, China and Mr. **Mauricio Cardenas** from Italy are seasoned architects with many years experience of bamboo construction. 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".

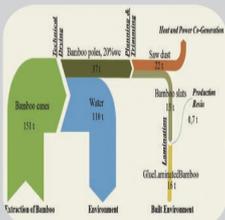


Martin Tam



Mauricio Cardenas

Research



The construction industry consumes almost 30% of the global energy and is responsible for 40% of global CO₂ emissions. Sustainable building solutions are urgently required to support the world's growing, and increasingly urbanised population. In order to achieve this it is imperative for the construction industry to shift from energy-intensive materials like cement and concrete, towards renewable and sustainable bio-based materials. Dr. **Edwin Zea Escamilla**, member of INBAR Construction Task Force and specialist on life cycle and sustainability assessment of construction materials and buildings, is the main-author of several scientific articles which portray the potential benefits of the use of industrialised bamboo as construction material.

Zea Escamilla's work on sustainable housing solutions in the Philippines estimated that a 5500-hectare of bamboo plantations could potentially generate over 28,000 jobs and save over a hundred million tonnes of CO₂ equivalents, over 130 years. [Read More](#)

Journal

S. Kaminski, A. Lawrence, D. Trujillo, Feltham, I. and López, L. Structural use of bamboo. Part 3: Design values. *The Structural Engineer*, 2016(12). [Link](#)

Zea Escamilla, E. and G. Habert (2016). "Method and application of characterisation of life cycle impact data of construction materials using geographic information systems." *The International Journal of Life Cycle Assessment*: 1-10. [Link](#)



Publications

Post-earthquake Report in Spanish

INBAR published a post-earthquake report about bamboo structures, and presented the recommendations for the reconstruction with bamboo on the coast of Ecuador. The original version created last November is in Spanish, however INBAR will be releasing an English version within the next few months.