

9th Pacific Rim Bio-Based Composites Symposium - List of Presentations

Main Session Speakers

Thurs am	9:20-10:00 Mike Wolcott	Natural Fiber Thermoplastic Composites: The State of the Future
	10:00-10:3 Chris van Kooten	Overview of Australasian Wood Panels Market
	11:00-11:3 Paul Smith	Market-Driven Innovation for New Thermoplastic-Natural Fibre Composites (TNFCs)
	11:30-12:0 Philip D. Evans	Three-dimensional Visualization of UF Resin Distribution in Particleboard using X-ray Micro-computed Tomography
Fri pm	3:00-3:30 Les Wingham	A Brief Overview of China's Woodpanels Industry as Seen from the Ground
	3:30-4:00 Wayne Wasylciw	Improvement of MDF Panel Properties Through the Addition of Essential Plant Oils During Blending
	4:00-4:30 Philip E. Humphrey	Adhesion Kinetics and Thermally Driven Polymer Transformations in Composite Materials During Pressing

Thursday

1:00-4:30

Stream 1

Adhesion

1	Charles R. Frihart	Why Do Some Wood-Adhesive Bonds Respond Poorly To Accelerated Moisture-Resistant Tests?
2	Panagiotis Nakos	The Challenge of Bio-Adhesives for the Wood Composite Industries
3	Weihong Wang	Preparing Adhesive from Rice Bran
4	Zhang Yang	Study on the Technology of the Poplar Particleboard and Plywood with Soy Adhesive
Afternoon Break Coffee & Tea		
5	Ken Van Langenberg	The Mode I Fracture Energy of Isocyanate-based Adhesives
Morning Break Coffee & Tea		
6	David P. Harper	Opportunities for Low-Temperature Radiation Cured Adhesive in Natural Fiber Based Composites

Thursday

1:00-1:25

Fibre Reinforced Plastics

7	Sharifah Nabihah Syed Jaafa	Mechanic Properties of Moulded Phenolic Resin Reinforced Oil Palm Empty Fruit Bunch (EFB)
8	Sahrim Ahmad	Mechanical Properties of Rubber Toughened Polyester-Kenaf Composite
9	Puad Elham	Properties of Empty Fruit Bunch Fibre – Polypropylene Composite
10	Jeremy Warnes	High Aspect Ratio Fibres
Afternoon Break Coffee & Tea		
11	Weihong Wang	Wheat-Straw-Polyethylene Composite by Hot Pressing Method
Chemical Modification		
12	Siti Rafedah Abdul Karim	Volumetric Swelling Analysis of Anhydrides Modified Rubberwood (Hevea Brasiliensis Muell. ARG)
13	Charles R. Frihart	Enhanced Understanding of the Relationship between Chemical Modification and Mechanical Properties of Wood

Stream 2

Friday

8:00-2:30

VOC Emissions

14	Jamie Hague	Low Formaldehyde Emission Aminoplastics for the Wood Panels Industry
15	Vera Steckel	Comparison of Rapid Testing Systems for Determining VOC-Emissions from Wood Products with the Chamber Method
16	Jose Gomez Bueso	"AsWood™ Resin System" - Protein Modified Resol resins for the Low Formaldehyde Emission panels
17	Jun Shen	Factors Influencing Volatile Organic Compounds Emit from Particleboard
Morning Break Coffee & Tea		
18	Martin Ohlmeyer	Parameters Influencing The Emissions Of Volatile Organic Compounds From OSB
19	Kohta Miyamoto	VOC Emission from Overlaid Wood-based Materials Using Toluene-added EVA Adhesive
20	Stephen Young	Experiences of a New Zealand Company Entering the European Market

Friday

8:00-8:25

Reconstituted Composites

25	Mohd Ariff Jamaludin	Sandwiched Bagasse Particleboard as a Lightweight Material for the Furniture and Building Construction Industries
26	Mohamad Jani Saad	Development of Low Density Particleboard using Kenaf Core
27	J. Ratnasingam	The Machining Characteristics of Oil Palm Empty-Fruit Bunches (EFB) Particleboard
28	Jan Luedtke	Foam Core Panels Produced in a One-stage Process: Composition and Specific Properties
Morning Break Coffee & Tea		
29	Jamaludin Kasim	Effect of Resin and Wax Content on the Properties of Three Layer Oil Palm Board
30	Warren Grigsby	Comparison of Blowline and Mechanical Blender Resin Addition in MDF. Implications for Resin Efficiency.
31	Marcus Foong	Manufacture of Medium Density and Thin High Density Fiberboard Using a Formaldehyde-Free Soy-Based Adhesive System

Lunch

Engineered Wood Products

21	Brad Jianhe Wang	Benchmarking BC Coastal Douglas-Fir and Hemlock Veneers for LVL Products
Morning Break Coffee & Tea		
22	Mohd Khairun Anwar	Bonding Properties and Dimensional Stability of 5-Ply Phenolic-Treated Plybamboo
23	H'ng Paik San	Effect of Pressing Pressure and Glue Spread Rate on Bending and Physical Properties of Three Layers Engineered Board Produced from Oil Palm Trunk
24	Martin W. Feng	Manufacture of Borate-Treated Glulam – A New Product Resistant to Termites, Mold and Decay

Lunch

12:50-1:15

Inorganic Binders

32	Shahril Anuar Bahari	Characterization on Bending Strength of Binderless Bamboo Fibreboard (BBF)
Morning Break Coffee & Tea		
33	Karl Englund	Magnesium-Phosphate Binders for Wood Fiber Composites
34	Xianquan Zhang	Study of Wheat Straw – Gypsum Composite Material.
35	John D. Wolodko	Flexural Properties of Hemp Reinforced MgO Cements

Posters**Thursday 4:30-6:30pm**

P1	Barry Andersson	The Challenges of Establishing Quality, Safety and Environmental Management Systems for a Greek Resin Manufacturer
P2	Hazleen Anuar	Kenaf Natural Fibre Reinforced Thermoplastic Natural Rubber Composites
P3	Mohd Khairun Anwar	Failure Characteristics of Phenolic-treated and Untreated Plybamboo
P4	Marian Babiak	Thermal Properties of Wood and Their Measurement
P5	Warren Grigsby	Effect of UF Resin Distribution on MDF Panel Properties
P6	Chia Chin Hua	Magnetic Paper from Unbleached Kraft Fibres – Characterizations using PAS and ATR FTIR
P7	Atsuko Ishikawa	Factors of Acetaldehyde Emission from Solid Wood
P8	Jamaludin. Kasim	Strand Size Effect on Properties of Oriented Strand Board (OSB) from <i>Leucaena leucocephala</i> Wood
P9	Szalai László	Online Wood Research Database
P10	Martin Markotsis	Enhanced Performance of Bioplastics and Biocomposites by New Bio-Fibre and Biomass Compounding Technologies
P11	Seichang Oh	Adhesives Formulated with Chemically Modified Okara and PRF for Radiata Pine Plywood Panels
P12	J. Ratnasingam	Oil Palm Biomass: A Potential Fiber Resource for the Composite Industry
P13	Mohamad Jani Saad	The Development of Oriented Strand Board from Kenaf Bark
P14	Hiroki Sakagami	Visualization of microcracks occurring during drying
P15	Siti Norasmah Surip	Dynamic Mechanical Thermal Properties of TPNR Nanocomposites: The Effect of Processing Method
P16	Kinji Taki	Manufacturing of Particleboards from Kaoliang (<i>Sorghum narvovus</i>)
P17	Ken Van Langenberg	Measuring Tack Development in Wood Adhesives. A New Method using the Automatic Bond Evaluation System (ABES)
P18	Qingwen Wang	Influence of Boron Compounds and Phosphates on Lignin Pyrolysis
P19	Sarani Zakaria	The Absorption of Nano-Magnetic Particles in Solid Rubber Wood: Determination of the Diffusivity
P20	Xiao-dong ZHU	Defect Nondestructive Test of Wood Based on Vibration Modal Analysis