

“Innovation and Challenges in Bio-based Composites – How Far to the New Frontier?”

**9TH PACIFIC RIM
BIO-BASED COMPOSITES SYMPOSIUM**



5-8TH NOVEMBER 2008
Novotel Lakeside Hotel
Rotorua, New Zealand

Event Sponsors



www.biobased-composites.com



9th Pacific Rim Bio-Based Composites Symposium
5-8th November 2008, Novotel Lakeside Hotel, 11 Tutanekai Street, Rotorua, New Zealand

PROGRAMME – Pre-Symposium Workshop – Wednesday 5th November

Life Cycle Assessment Workshop – In a very short time period the importance of preserving our planet has become internationally recognised, however, the global rush into sustainable solutions has not always resulted in the desired outcomes. As researchers we can design solutions or biomaterials that appear sustainable, but a thorough analysis is required before all the potential environmental impacts are understood. This one-day workshop will outline internationally accepted protocols (ISO14040 based) for assessing the full environmental impact of materials or products and provides examples of how the methodology has been applied. Through the interactive nature of the workshop participants will get some hands on experience in the application of Life Cycle Thinking. This workshop also includes a North American perspective on ‘Green’ or sustainable composites.

TIME	SESSION	SPEAKER
8:30 – 9:00 am	Workshop Registration	
9:00 – 10:00 am	Introduction to Life Cycle Thinking <i>Interactive Presentation</i>	Barbara Nebel, Scion, Wellington Jake McLaren, Formway Furniture, Wellington
10:00 – 10:30 am	MORNING TEA & COFFEE	
10:30 – 11:15 am	Life Cycle Management - Application of Life Cycle concepts in practice <i>Presentation and Discussion</i>	Jake McLaren
11:15 – 11:45 am	Life Cycle Assessment – A tool for assessing the environmental performance of materials and products <ul style="list-style-type: none"> • Concept • Available tools <i>Presentation</i>	Barbara Nebel
11:45 – 12:15 pm	Apply Life Cycle Thinking <i>Workshop</i>	All
12:15 – 1:00 pm	LUNCH	
1:00 – 2:00 pm	Case Studies & Industry Examples Including: <ul style="list-style-type: none"> • Formway Furniture • Locus Research 	Jake McLaren Tim Allen
2:00 – 2:30 pm	Summary	
2:30 – 3:30 pm	Green Resin Strategies in the North American Interior Wood Composite Panel Industry.	Paul Smith, Pennsylvania State University, USA
3:30 – 4:00 pm	AFTERNOON TEA & COFFEE	
4:00 – 5:00 pm	The Role for Wood in Sustainable Building Standards: Getting Past Certification	Mike Wolcott, Washington State University, USA

DRAFT PROGRAMME – Symposium – Thursday 6th Nov

7:30 – 8:30 am	Registration	
8:30 – 9:20 am	Symposium Official Opening Jamie Hague, Symposium Chair, CSIRO, Melbourne, Australia	Maori Welcoming Ceremony Local Kapa Haka Group
9:20 – 10:10 am	Thermoplastic Natural Fibre Composites: State of the Future	Mike Wolcott, Washington State University USA
10:10 – 10:30 am	Overview of Australasian Wood Panels Market	Chris van Kooten, Dynea, New Zealand
10:30 – 11:00 am	MORNING TEA & COFFEE	
11:00 – 11:30 am	Market-Driven Innovation for New TNFC's	Paul Smith, Pennsylvania State University, USA
11:30 – 12:00 pm	Three-dimensional visualization of UF resin distribution in particleboard using X-ray micro-computed tomography	Phil Evans, University of British Columbia, Canada
12:00 – 1:00 pm	LUNCH	
1:00 – 3:00 pm	Concurrent Technical Sessions in Batten I, Batten II & Rutherford Rooms	3 Streams x 4 Papers – Refer to website for details
3:00 – 3:30 pm	AFTERNOON TEA & COFFEE	
3:30 – 4:30 pm	Concurrent Technical Sessions continue	3 Streams x 2 Papers – Refer to website for details
4:30 – 6:30 pm	POSTERS SESSION	All delegates in Rutherford Room
7:00 – 7:30 pm	PRE-DINNER DRINKS & NETWORKING	
7:30 pm	SYMPOSIUM DINNER – Guest Speaker – Rob Franich, Principal Scientist, Scion, Rotorua	

DRAFT PROGRAMME – Symposium – Friday 7th Nov

TIME	SESSION – Stream 1	SESSION – Stream 2
8:00 – 10:00 am	Concurrent Technical Sessions in Batten I, Batten II & Rutherford Rooms	3 Streams x 4 Papers – Refer to website for details.
10:00 – 10:30	MORNING TEA AND COFFEE	
10:30 – 12 noon	Concurrent Technical Sessions continue	3 Streams x 3 Papers – Refer to website for details
12:00 – 1:00 pm	LUNCH	
1:00 – 2:30 pm	Concurrent Technical Sessions continue	3 Streams x 3 Papers – Refer to website for details
2:30 – 3:00 pm	AFTERNOON TEA AND COFFEE	
3:00 – 3:30 pm	A Brief Overview of China as Seen from the Ground	Les Wingham, Restek, Melbourne, Australia
3:30 – 4:00 pm	Improvement of MDF panel properties through the addition of essential plant oils during blending	Wayne Wasylciw, Alberta Research Council, Canada
4:00 – 4:30 pm	The role of adhesion kinetics and thermally driven polymer transformations in the establishment of pressing and adhesive formulation strategies for contemporary and future composite materials	Phil Humphrey, Adhesive Evaluation Systems Inc, USA
4:30 pm	SYMPOSIUM CONCLUDES	



This programme is subject to change. Please check the symposium website for the most up-to-date programme.

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ITINERARY – Post-Symposium FIELD TRIP – Saturday 8th Nov

TIME	PLACE	DETAILS
9am Departure	DETAILS TO BE CONFIRMED	Please note that field trip registration and fees are separate from the symposium
3pm Return	Port of Tauranga, Mt Maunganui – <i>Tour forest products export operations</i> Wood Processing Plants – <i>Tour Bay of Plenty production plant operations.</i>	

SYMPOSIUM HOST ORGANISATIONS

 <p>CSIRO – The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's premier research organisation, employing over 5000 scientists with expertise in all key fields of science. Its primary remit is to assemble multidisciplinary teams to tackle and solve major national challenges.</p> <p>The CSIRO's forest-based research capability encompasses both molecular and quantitative genetics, precision forest management, forest health, fire, forest ecology, and forest products ranging from sawn lumber, composite materials and paper, through to the next generation of products including biofuels, green chemicals and advanced nanofibre-based materials.</p>	 <p>SCION – Scion is a Crown Research Institute dedicated to building a stronger bio-based economy for New Zealand through its Biomaterials</p> <p>Futures strategy: Advancing the widespread utilisation of renewable materials and products, derived from plants, for economic, environmental, social and cultural returns.</p> <p>Scion's research activities span three key areas: Sustainable design - building a balanced environmental and economic future; New forests and forest science - supporting the transformation of the forestry sector, and Bioproduct development - the innovative use of renewable resources for global advantage.</p>
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GETTING TO ROTORUA– Information for Symposium Delegates

Please Note: In most cases Auckland Airport is the closest international airport to Rotorua. Some flights from Australia fly into Hamilton Airport which is closer.

Useful Websites: www.auckland-airport.co.nz (Auckland International Airport) & www.rotoruanz.com (Rotorua Tourism Website)

TRANSPORT	DETAILS & COSTS	CONTACT DETAILS
Aeroplane	The Air New Zealand Domestic Terminal is a short walk from the Auckland International Terminal. Auckland to Rotorua – Approximately \$NZ170 Return Domestic connections are sometimes included in international fares so check with your travel agent on booking.	Book Online: www.airnz.co.nz
Bus	Regular bus services to Rotorua are available from numerous New Zealand locations. Approximately \$NZ80 Return from Auckland Airport	Book Online: www.nakedbus.com Email: info@intercitygroup.co.nz
Rental Car	There are a number of car rental companies based at New Zealand Airports. However, these are often the more expensive option. Some companies have free transport to their depot. Expect to pay upwards of \$NZ40 per day	Cost Comparison Website: www.vroomvroomvroom.co.nz Airport Based Companies: www.avis.co.nz www.budget.co.nz www.hertz.com Companies with Transfers: www.ezy.co.nz www.apexrentals.co.nz
Luxury Shuttle	A direct, non-stop, door to door service. Runs between Auckland, Tauranga or Hamilton Airports and Rotorua. Available for any flight at any time, day or night, 7 days a week. \$NZ200 return Auckland Airport to Rotorua	Website: www.luxuryshuttles.co.nz Phone: +64 7 574 9600

ROTORUA ACCOMODATION – Information for Symposium Delegates

Important Note to Delegates – Rotorua is a popular tourist destination and November is a busy time as summertime nears. Please ensure you book early to get the best rates at your desired accommodation. **Accommodation bookings must be made directly with the venue. Please mention you are attending the Symposium in order to receive the delegate rates listed at Novotel or Ibis only.**

VENUE	DETAILS	DELEGATE RATES & CONTACT
Novotel Lakeside Hotel 11 Tutanekei Street 4-Star Hotel	Symposium Venue Rotorua's newest and most convenient hotel to the lakefront, parks and downtown Rotorua.	Superior Room \$174 + GST, King Suite \$263 + GST OR Executive Suite \$352 + GST Phone: 0800 77 66 77 (NZ only) Email: h1874-re01@accor.com
Ibis Hotel Rangiuru Street 3-Star Hotel	Very new and immediately adjacent to the Novotel Hotel this is the best value in comfortable and convenient accommodation	Standard Room \$112 + GST Phone: 0800 77 66 77 (NZ only) Email: h1874-re01@accor.com
Ledwich Lodge 12-14 Lake Road	This motel is situated on the lake front in the central business district and is walking distance of the symposium venue.	Website: www.ledwichlodgemotel.co.nz Email: ledwich@clear.net.nz Phone: 0508 730 049 (NZ Only)
Backpackers	There are several backpacker-style options in downtown Rotorua within easy walking distance of the symposium venue.	Treks Backpackers: www.treks.co.nz Base Hot Rock: www.stayatbase.com Cactus Jack: www.cactusjackbackpackers.co.nz Planet Nomad: www.planetnomad.co.nz

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SYMPOSIUM REGISTRATION FORM

Venue: Novotel Lakeside Hotel, 11 Tutanekai Street, Rotorua, New Zealand

Please note – EARLY BIRD DISCOUNT applies if you register and pay by Friday, 19th September 2008

DELEGATE DETAILS

Full Name	Position	Email	LCA Workshop	Symposium	Field Trip

Organisation: _____

Postal Address: _____

Country: _____

Tel: _____ **Fax:** _____

SYMPOSIUM RATES

ACTIVITY (Rates exclude NZ Goods & Services Tax)	Early Bird Rate	Standard (after 19 th Sept)	Number of Delegates	Total Payment (NZ\$)
Life Cycle Assessment WORKSHOP Wednesday 5 th November	\$100	\$120		
Bio-Based Composites 2-day SYMPOSIUM Thursday 6 th – Friday 7 th November	\$800	\$900		
Post-Symposium FIELD TRIP Saturday 8 th November	\$64	\$72		
	SUBTOTAL			
Goods & Services Tax (GST) must be paid for all services received	Add NZ Good & Services Tax (12.5%)			
	TOTAL FOR PAYMENT (NZ\$)			

DELEGATE PAYMENT DETAILS

Method of Payment <input type="checkbox"/> Cheque payable to Innovatek Ltd <input type="checkbox"/> Direct credit to our NZ bank account Westpac Rotorua 03-1552-0257749-00 <input type="checkbox"/> Please debit my MASTERCARD/VISA or AMERICAN EXPRESS CARD (circle one)	Please return registrations and payment by either: Post: 9 th Pacific Rim Bio-Based Composites Symposium Innovatek Ltd, PO Box 6160, Rotorua, New Zealand Fax: (+64)7 921 1381 or email: libby.stulen@innovatek.co.nz
Amount of Payment Enclosed: NZ\$ _____	Please direct any technical enquiries relating to papers and presentations to: amanda.davies@innovatek.co.nz Notes: Registration fee includes morning and afternoon teas, lunches, refreshments and Symposium Dinner as well as a copy of the detailed symposium proceedings in hardcopy and on CDROM.
Credit Card Number: _____	
Expiry Date: _____	
Cardholder's Name: _____	
Cardholder's Signature: _____	Refund Policy – For cancellations received by 22 nd October, 50% of the fees paid will be refunded. Cancellations after this time will not qualify for a refund, however another delegate from the same organisation may attend in place of the cancelled registered delegate.