

PROVISIONAL PROGRAMME
The International Panel Products Symposium 2009
presents all the technical expertise and industry insights
of previous events. This year we also feature a focus
on sustainability and sustainable buildings.
JOIN US IN NANTES THIS SEPTEMBER FOR IPPS 2009.



IPPS 2009

Latest updates in the panel products industry



16-18 September 2009

La Cité Internationale des Congrès
Nantes, France



www.ipps.uk.com

IPPS 2009

Day 1: 16 September

Dear Colleague,

Join us for this year's International Panel Products Symposium in the beautiful city of Nantes!

IPPS 2009 brings together experts from academic and industrial sectors to discuss the issues we face today and look at future opportunities. The current economic predictions are bleak for our industry with many plant closures and production curtailments. However, this year the focus for IPPS is to look at some of the future opportunities for panel products in the built environment and how this can help with sustainability in construction.

Increasing environmental legislation is having an impact on the practices used in the built environment and companies are challenged by these new measures. Materials that can clearly demonstrate their technical and environmental performance are needed to achieve these demands. Wood based panel products clearly have a role in meeting these needs.

This year, session 1 will therefore **focus on sustainable buildings** providing an insight into how we can clearly demonstrate the benefits of our materials to the construction sector.

The focus for session 2 will be **formaldehyde**. Tightening regulations presented from a Californian perspective will be highlighted followed by new approaches to reduce the level of formaldehyde in panel products.

Other sessions will look at technical developments in plywood products, light weight panels and machinery and process control whilst the final session will look at alternative feedstocks / recycling of our products.

IPPS 2009's packed programme discusses all the key concerns that we face today. Delegates can develop new ideas for future products; take a look at the issues of formaldehyde; discuss the concerns over lack of materials and get an update on the latest production technologies that can save money.

We look forward to seeing you there!

ROBERT ELIAS

Commercial Manager, Centre for Advanced and Renewable Materials, BIOCOMPOSITES CENTRE, UK

Exhibition and sponsorship opportunities

A range of sponsorship and exhibition based packages are available to organisations looking to develop their business within the wood panels sector. Participation at **IPPS 2009** will demonstrate your organisation's expertise in these markets and raise your corporate profile amongst senior decision-makers in leading international companies. For more information on how this conference can benefit your company, please contact Caroline Potapa on +44 (0) 1372 802101 or caroline.potapa@pira-international.com

08:00 ▶ Registration and refreshments

09:00 ▶ Opening address
Robert Elias, Commercial Manager, Centre for Advanced and Renewable Materials, BIOCOMPOSITES CENTRE, UK



Sustainability and Sustainable Buildings

09:20 ▶ **The wood-based panels industry: Market developments and challenges for the future**
Keynote
Kris Wijnendaele, Secretary General, EUROPEAN PANELS FEDERATION and EUROPEAN FEDERATION OF THE PLYWOOD INDUSTRY (FEIC), Belgium



09:50 ▶ **Sustainable times - setting a benchmark for the forest products industry for the 21st Century**
John Guerin, European Commercial Director, WEYERHAEUSER PRODUCTS Ltd, Belgium



10:20 ▶ **Materials and their contribution towards the sustainable buildings LEED approach**
Aurelio Ramírez Zarzosa, Founder and President, SPAIN GREEN BUILDING COUNCIL, Spain



10:50 ▶ Morning refreshments

11:20 ▶ **Environmental product declaration of wood based panels: an answer to sustainability requirements**
Claire Cornillier, Environmental Project Manager, FCBA ENVIRONMENT & HEALTH DEPARTMENT, France
Co-Authors: Pacitto P, Michaud C and Vial E



11:50 ▶ **Sustainability tools used in the UK for construction materials and products**



- Construction sector embracing new methods such as MMC, modular units, energy efficiency, thermal bridging and sustainability
- BRE in UK leading way in developing tools to understand modern requirements
- Talk will outline tools such as Ecohomes, Code for Sustainable Homes, Smartwaste, BREEAM, The Green Guide
- It will look at the potential of panel products within these tools and for sustainable construction

Dr Dennis Jones, Project Manager, WOODKNOWLEDGE WALES, & Senior Consultant BRE WALES, UK

12:20 ▶ Lunch will be served for all speakers and delegates

Indoor Air Quality and Formaldehyde

13:40 ▶ **Formaldehyde in the built environment: the Californian perspective**
Maureen F. Gorsen, Director - Department of Toxic Substances Control, CALIFORNIA EPA, US

14:10 ▶ **Development of a system for the production of low formaldehyde emission particleboards**



- UF resins in a perspective of the Formaldehyde content evolution
- Analytical techniques used to analyse resins and scavengers
- Chemical and structural perspective of scavengers
- Application of formaldehyde scavengers to wood particleboards

Filipe José Celestino Silva, PhD Student RCP - Network for Competence in Polymers, Department of Chemical Engineering, Faculty of Engineering, UNIVERSITY OF PORTO, Portugal
Co-Authors: Pereira J, Ferra J, Mena P, Liberal JP, Magalhaes F, Mendes A, Martins J and Carvalho L

14:40 ▶ Afternoon refreshments

15:10 ▶ **Liquefied wood as a formaldehyde scavenger for wood-based panels**
Sergej Medved, Head of Laboratory for Wood Based Composites, UNIVERSITY OF LJUBLJANA, Slovenia



15:40 ▶ **An investigation of the origin of formaldehyde found in poplar veneers**
Baha Guezguez, PhD Student, ECOLE SUPERIEURE DU BOIS, France
Co-Authors: Irle M, Belloncle C



16:10 ▶ **Poster session and networking reception**

Latest updates in the panel products industry

Three day conference: 16-18 September 2009

La Cité Internationale des Congrès, Nantes, France

Day 2: 17 September

08:00 ▶ Registration and refreshments

Plywood and Laminated Products

08:30 ▶ **Physical, mechanical properties and burning behaviours of beech plywood made of thermally modified veneers**



- Thermal modification of beech veneers in overheated steam
- Plywood sheets made in the laboratory
- Mechanical and physical plywood properties testing
- Burning behaviour and heat transmission coefficient determination

Marek Grzeskiewicz, Faculty of Wood Technology, WARSAW UNIVERSITY OF LIFE SCIENCES - SGGW, Poland

Co-Authors: Borysiuk P and Jaskolowski W

08:55 ▶ **Microwave drying of Pinus radiata D. Don. Veneer**



- The use of microwave processing for plywood manufacture including:
 - the microwave heating of veneer logs prior to peeling
 - the microwave drying of veneer
 - modification of refractory peeler cores for value added products
- The drying of rotary peeled veneer using microwaves

Prof Peter Vinden, Chair, Forest Industries, THE UNIVERSITY OF MELBOURNE, Australia

Co-Authors: Torgovnikov G, Subarudi and Wahudi

09:20 ▶ **Improvement of the properties of birch plywood by thermal modification**



- Improving natural durability and hydrophobic properties of wood and wood products by thermo-modification
- Thermo-modification of birch plywood, products' mechanical properties and resistance to rot fungi depending on the modification temperature
- Changes to wood composition and structure by thermal treatment processes as a key for understanding and optimising thermo-modification processes

Vladimirs Biziks, Researcher, LATVIAN STATE INSTITUTE OF WOOD CHEMISTRY, Republic of Latvia

Co-Authors: Andersons B, Zudrags K, Andersone I, Grinninsh J and Sansonetti E

09:45 ▶ **Possibility of using Arundinaria alpina bamboo based panel boards for interior applications**



- Bamboo is one of the fastest growing non-wood plants for production of eco-friendly panel board materials
- Panel boards produced revealed water resistance properties similar to those of wood based boards
- Bamboo panel boards bonded with both PF and UF cannot be used for exterior applications

Mathias Lugoye, College of Engineering and Technology, UNIVERSITY OF DAR ES SALAAM, Tanzania

Co-Authors: Tesha J.V, Nyahumwa C and Karlsson S

10:10 ▶ **Enhancing the environmental and mechanical properties of LVL**



- How to drastically decrease the glue rate into LVL using very thick veneer
- Determination of lathe checks influence on LVL mechanical properties
- Research of a compromise between mechanical and environmental (glue consumption) concerns
- Valorize second quality woods

Rémy Marchal, Materials and Process Laboratory (LABOMAP - EA 3633) Department of Wood Material and Machining, ECOLE NATIONALE SUPERIEURE D'ARTS ET METIERS, France

Co-Authors: Deschamps Clement, Butaud Jean-Claude and Cottin Fabrice

10:35 ▶ Morning refreshments

Lightweight Panels

11:20 ▶ **Kaurit® Light - the solution for lightweight furniture**



- New, 30% lighter board on existing equipment using existing technology
- Low investment and minimum risk
- Savings in energy, transport and packaging costs
- Eco-efficiency: equal to state of the art wood based boards

Maxim Peretolchin, Research Scientist, BASF, Germany

11:45 ▶ **Perceptions of Austrian furniture customers of lightweight materials**



- Analysis of the acceptance, perception and image of different lightweight solutions among respondents
- Product requirements for and benefits of lightweight applications
- Identification of market entry barriers and market opportunities
- Characterisation of applications most promising for the use of lightweight materials

Asta Eder, Senior Researcher, COMPETENCE CENTRE FOR WOOD COMPOSITES AND WOOD CHEMISTRY (WOOD K PLUS), Austria

Co-Author: Peter Schwartzbauer, Institute of Marketing & Innovation, Department of Economics and Social Sciences, BOKU - University of Natural Resources and Applied Life Sciences, Austria

12:10 ▶ **The continuous production of sandwich panels with paper honeycomb core for furniture applications**



- Paper honeycomb technology and panel production processes
 - Design of low cost sandwich panels with thin skin layers and paper honeycomb core
 - Development of a continuous in-line production process
 - The scope of the new sandwich panels and important material properties
- Max Britzke, Research Assistant, Faculty of Mechanical Engineering, Institute of Wood and Paper Technology, Professorship of Wood and Fibre Materials Technology, DRESDEN UNIVERSITY OF TECHNOLOGY, Germany**
- Co-Authors: Herold J, Korn C, Wagenfuhr A**

12:35 ▶ Lunch will be served for speakers and delegates

Machinery, Process Control and Machining

14:00 ▶ **Benchmarking in the wood based panel business - determining your plant's competitive position**

Keynote

- Definition of benchmarking
- Benefits and uses of benchmarking studies
- Characteristics of a good benchmarking study
- Sample contents of a benchmarking study

Jussi Silventoinen, Head of Forest Industry, INDUFOR OY, Finland

14:25 ▶ **Online monitoring of the processing of strand based wood composites: a real time option for optimised production**



- Overview of the concept and methodology used in the development of a software application for online monitoring of the processing of strand based wood composites
- Samples of simulations
- Future development and potential for mill applications

Dr Azzeddine Oudjehane, President, AZZO & ASSOCIATES CONSULTING, Canada

14:50 ▶ **High energy and maintenance savings by improving tribology in continuous MDF/OSB/PB Presses**



- Optimised tribology on a continuous PB/MDF/OSB press line can save:
 - Reasonable energy quantities
 - High maintenance efforts
 - High wear of moving parts
- While at the same time increase readiness, productivity and work place and environmental safety

Achim Offerman, Senior Manager, IDEMITSU LUBE EUROPE GmbH, Germany

Co-Author: Jansen U

15:15 ▶ Afternoon refreshments



15:45 ▶ Effect of formaldehyde scavengers on the machining of particleboard
Jorge Martins, Coordinator Professor, ESTV-POLYTECHNIC INSTITUTE OF VISEU, Portugal
Co-Authors: Garrido N, Pereira J, Martins J, Mendes J, Costa C and Carvalho L



16:10 ▶ Automatic physical and aesthetic repair of wood panels: an intelligent alternative to automatic downgrading
 • Advanced multisensory camera scanners and vision-controlled ultra-fast XYZ robotic manipulators to physically repair panels
 • Roadmap for the next step in automatic panel repair technology
 • 'Green' wood panel factory
Dr Robert Massen, Advisor, BAUMER INSPECTION GmbH, Germany
Co-Authors: Marc O. Kuehn Joerg Eberhardt



16:35 ▶ State of the art and future trends on measuring technologies for online control in the wood-based panel industry
 • New requirements for online control of the manufacturing process
 • Online measuring technologies to survey, detect and forecast the quality of the raw materials
 • Optimisation of production to save material and energy
Dr Joerg Hasener, R&D Manager MT, FAGUS-GRECON GRETEN GmbH & Co. KG, Germany



17:00 ▶ Closing remarks from the Chair

18:00 ▶ Networking dinner at local restaurant



Day 3: 18 September

08:30 ▶ Registration and refreshments

Wood Based Panels – Recycling and Novel Feedstocks

09:00 ▶ COST Action E49: Processes and performance of wood-based panels
 • Contribution from WBP to the environment and research that aims to reduce any negative impacts
 • Overview of COST Action E49
 • Outline of current research work being conducted on these negative impacts
Mark Irle, Research Director, ECOLE SUPERIEURE DU BOIS and Chairman of E49, France



09:25 ▶ MDF/HDF production from plantation wood species
 • Establishing the raw material base for the newly built MDF/HDF production line in Mohács, Hungary – these raw materials should be obtained from wood plantations
 • Laboratory experiments were done on production of MDF and HDF boards with the following raw materials: 5 and 10 years old Pannonia poplar, 12/14 poplar, black locust and Austrian pine
 • The following characteristics of the boards were tested: bending strength, internal bond, modulus of elasticity, thickness swelling, density, moisture content, formaldehyde content



Tibor Alpar and Tamas Faczan, Faculty of Wood Sciences, Institute of Wood and Paper Technology, UNIVERSITY OF WEST HUNGARY, Hungary
Co-Authors: Katoli G, Racz I

09:50 ▶ The potential for utilisation of corn stalk in medium density fibreboard production
 • Corn stalk is used as raw material for MDF production utilising different press time and temperature
 • Mechanical properties (MOR, MOE & IB) of the produced boards were superior to the EN standard
 • Surface smoothness and density profile was comparable to MDF from wood
Dr Abolfazl Kargarfard, Research Assistant Professor, Wood and Forest Products Research Division, IRAN RESEARCH INSTITUTE OF FORESTS AND RANGELANDS, Iran
Co-Author: Nourbakhsh A



10:15 ▶ Properties of fibreboard pulps manufactured from selected types of recovered wood
 • Classification of recovered wood resources: the type of origin product (palettes, boxes, containers and other), content of softwood, hardwood and exotic wood and the content of other materials
 • Overview of pulp characteristics used for production of different fibre panel products
 • Characteristics of experimental pulps produced from recovered wood
Marcin Klimczewski, Assistant Professor and Lecturer, Faculty of Wood Technology, WARSAW UNIVERSITY OF LIFE SCIENCES, Poland
Co-Authors: Danecki Lech, Niciewicz D



10:40 ▶ Recycling of UF-bonded fibreboards
 • Recycled fibres are different in physical and chemical behaviour compared to virgin fibres
 • Virgin fibres can be partially substituted by recycled fibres
 • Boards made with about 30% recycled fibres are more or less of the same quality as boards from virgin fibres
 • The use of recycled fibres has no negative effect on the formaldehyde release of the boards



Dr Edmone Roffael, Professor, UNIVERSITY OF GÖTTINGEN, Germany
Co-Authors: Behn C, Dix B and Bär G

11:05 ▶ Morning refreshments

Resins

11:35 ▶ Formaldehyde-free dimethoxyethanal-derived resins for wood based panels
Dr Milena Properzi, Research Associate and Lecturer HF, BERNER FACHHOCHSCHULE, Switzerland



12:00 ▶ Evaluation of adhesive cure by ABES and IPATES for two UF resins
 • Production of the new generation UF resins, by improving the polymerisation reactions and mainly optimising the synthesis process
 • Determination of molecular weight distribution of the UF resins produced by different processes
 • Evaluation of the adhesive cure by IPATES and ABES for UF resins produced by different process



Joao Ferra, PhD Student, Department of Chemical Engineering – Faculty of Engineering, UNIVERSITY OF PORTO, Portugal
Co-Authors: Ohlmeyer M, Mendes A.M, Costa M.R, Carvalho L, Magalhaes F.D

12:25 ▶ Urea formaldehyde particleboard resins prepared with cornstarch and mimosa tannin
 • Physical properties of cornstarch-tannin-urea formaldehyde adhesives
 • Mechanical properties of particleboard manufactured using cornstarch-tannin-urea formaldehyde resins
 • Cornstarch-mimosa tannin-UF resin is a good wood adhesive for particleboard applications



Dr Amine Moubarik, Dr in Chemistry and Polymer Physics, UNIVERSITE DE PAU ET DES PAYS DE L'ADOUR, France

12:50 ▶ Closing remarks and end of conference, followed by 'lunch to go'.



CONFERENCE INFORMATION

THE VENUE

This year's IPPS conference will be held in the beautiful and historic city of Nantes in the heart of the Loire Valley. Easily reached by train (direct TGV connections to Paris/Charles de Gaulle Airport in 2 hrs, or Lyon/Lille in 4 hrs), road (3h15 to Paris on the motorway) and air (Nantes-Atlantique airport, the leading air travel hub in Western France with 67 domestic and international destinations).

GETTING THERE

Nantes International Convention Centre is located in town right opposite the high-speed train station and is directly accessible from the ringroad or from the airport by shuttle (15mins). You can easily walk to the city centre, take a bus or the tram.

La Cité Internationale des Congrès Nantes - Métropole
5, rue de Valmy, BP 24102
44041 Nantes Cedex 1
T: 02 51 88 20 00 / F: 02 51 88 20 20
E: info@congres-nantes.fr / www.congres-nantes.fr

ACCOMMODATION

Delegates are responsible for organising their own travel and accommodation. A limited number of rooms have been reserved at three local hotels by our booking agent Pro-ven. To take advantage of this special rate delegates must reserve their room no later than **15 June 2009**. Wherever possible accommodation should be reserved early as rooms cannot be guaranteed and rates are subject to change after this date.

Pro-ven will be happy to book your accommodation at these or an alternative hotel if you prefer, simply contact them on:

T: +44 (0) 1442 835713
F: +44 (0) 1442 835701
E: pira@pro-ven.com

Please quote 'IPPS conference' when booking.

YOUR EVENT ORGANISER

Pira International provides events, training, online information and publications across a wide range of topical issues affecting varied industries. Our 100% independent products are provided globally 24/7 and delivered by teams of independent experts at sites in London, UK and Portland, Maine, US across 14 key industry sectors. We specialise in providing expert quality information on: disruptive technologies and their application, research and product development, globalisation and new markets; production methods; regulatory compliance.

EVENT FEES

The event fee includes entry to the conference/workshop sessions and the exhibition, full documentation, lunch and refreshments. However, fees do not include delegate travel and accommodation. All credit card orders are processed at the day's £/€/\$ exchange rate at the time of the transaction. Please see note in Step 3 for further details.

CANCELLATIONS

Cancellations will be accepted and fees will be refunded (less 20% handling charge) only if made in writing and received ten working days before the event. Bookings cannot be cancelled nor fees refunded thereafter. Substitutions may be made at any time, please notify the Operations Manager, Jenny Fehrenbach +44 (0)1372 802166 or jenny.fehrenbach@pira-international.com

NOTE

Pira International does not accept liability for any loss of or damage to the personal effects of delegates attending the event. Pira International reserves the right to cancel, defer or modify the event proceedings without prior notice.

VISAS

Delegates requiring visas should request a visa invitation letter from Pira International at the time of registering for the event, ensuring sufficient time is left for applications to be completed. Delegates are then responsible for contacting the relevant/appropriate embassy themselves. Pira International can do nothing further to assist this process.

YOUR EVENT TEAM

Booking enquiries, exhibition and sponsorship
CAROLINE POTAPA
tel +44 (0)1372 802101
fax +44 (0)1372 802243
email caroline.potapa@pira-international.com

Conference Producer
BARBARA ROJAS
tel +1 207 781 9608
email barbara.rojas@pira-international.com

Event Manager
JENNY FEHRENBACH
tel +44 (0)1372 802166
email jenny.fehrenbach@pira-international.com

Marketing
ANNE SCHOFIELD
tel +44 (0)1372 802042
email anne.schofield@pira-international.com

IPPS 2009

Three day event: 16-18 September 2009

La Cité Internationale des Congrès, Nantes, France

1. DETAILS

Title.....First Name..... Last name.....
Organisation..... Position.....
Address.....
.....
.....
.....
..... Postcode.....
Telephone..... Fax.....
Email..... Skype.....

2. FEES

Early bird IPPS 2009 fee (when you book before 26th June).....£675
Full fee IPPS 2009.....£800
Late booking fee (valid from 21st August 2009).....£850
Academic rate*.....£340

*Available to full time students and teaching staff at Universities. Early bird offer does NOT apply.

Registration fees include: Attendance at all sessions of the conference / Lunch on both days of the conference and refreshment breaks.

Registration fees DO NOT include: Travel to and from France / Hotel and other personal expenses (special room rates are available for conference delegates and speakers - see 'Accommodation' hotel details.

Accounting code:..... Date received:.....

Please note: Invoices in Euros or Dollars will be calculated at that day's exchange rate. Credit card payments (in £ STG) will be necessary if your booking is made less than 10 business days prior to the start of the event. Where funds have not been received in advance, delegates will be required to supply credit card details at registration in order to gain entry to the conference. This credit card will be charged on-site and in £ STG. Current exchange rates and bank charges will apply.

To be invoiced in € Euros or \$ Dollars at the prevailing exchange rate - please tick the appropriate box: € \$

3. PAYMENT

PO number..... VAT No..... (VAT charged at 19.6%)

Please charge my credit card: AMERICAN EXPRESS VISA MASTERCARD

Credit card details will be necessary if your booking is made less than 10 business days prior to the start of the conference, or if your invoice remains unpaid at the start of the event.

Card No..... Expires..... Security code (CV2)

Cardholder name & address.....

Please invoice my company (invoices cannot be issued without receipt of a PO number at the time of booking)

Cheque or banker's draft (please make payable to Pira International)

Banker's information for credit transfer payments

Sterling A/C:	HSBC Bank plc, 100 King Street, Manchester M60 2HD Branch Sort Code: 40-31-24 Swift Code (BIC): MIDLGB22	Account No: 62182610 IBAN: GB88 MIDL 4031 2462 1826 10
US Dollar A/C:	City Bank NY Swift Code (BIC): CITIUS33	Account No: 30569898 ABA No: 021000089
Euro A/C:	Deutsche Bank AG London Branch Sort Code: 23-30-55 Swift Code (BIC): DEUTGB2L	Account No: 13116600 IBAN: GB35 DEUT 4050 8113 1166 00

Signature..... Date.....

Pira registration No. 3858209 Pira VAT No. 677 3667 81

Brochure registration code:

4. BOOKING

Pira International	Cleeve Road, Leatherhead Surrey KT22 7RU, UK	19 Northbrook Drive, Portland, ME 04105, US
Fax	+44 (0)1372 802243	+1 207 781 2150
Telephone	+44 (0)1372 802164	+1 207 781 9610
Online	www.intertechpira.com	www.intertechpira.com

IPPS 2009

Latest updates in the panel products industry



3 day conference: 16-18 September 2009

La Cité Internationale des Congrès Nantes, France



The BioComposites Centre
Bangor University
Deiniol Road
Bangor, Gwynedd
LL57 2UW, UK



Media and supporting associations:

wood based
Panels
INTERNATIONAL



BRITISH GREEN BUILDING COUNCIL

Speakers include:

- AZZO & Associates Consulting
- BASF
- Baumer Inspection GmbH
- Berner Fachhochschule
- California EPA
- BioComposites Centre
- Competence Centre for Wood Composites and Wood Chemistry (Wood K plus)
- Dresden University of Technology
- Ecole Nationale Supérieure d'Arts et Métiers
- Ecole Supérieure du Bois
- ESTV - Polytechnic Institute of Viseu
- European Panels Federation
- Fagus-GreCon Greten GmbH & Co. KG
- FCBA Environment & Health Department
- Idemitsu Lube Europe GmbH
- Indufor Oy
- Iran Research Institute of Forests and Rangelands
- Latvian State Institute of Wood Chemistry
- Spain Green Building Council
- The University of Melbourne
- Université de Pau et des Pays de l'Adour
- University of Dar es Salaam
- University of Göttingen
- University of Ljubljana
- University of Porto
- University of West Hungary
- Warsaw University of Life Sciences
- Warsaw University of Life Sciences - SGGW
- Weyerhaeuser Products Ltd
- Woodknowledge Wales

Speakers:

