

## KOMUNIKATY – ANNOUNCEMENTS

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### **COST E49: PROCESSES AND PERFORMANCE OF WOOD-BASED PANELS – THE ACTION SUMMARY AND FINAL CONFERENCE**

*The final conference of COST Action E49 “Processes and Performance of Wood-Based Panels” was held on 14<sup>th</sup>–15<sup>th</sup> September 2009 in Nantes, France. The whole 4-year’s activity of the Action was summarized.*

**Keywords:** wood-based panels, scientific and technical co-operation

The final conference of COST Action E49 was held on 14<sup>th</sup> and 15<sup>th</sup> September 2009 in Nantes, France. The Action title was “Processes and Performance of Wood-Based Panels”. The Chairman of the Action was Mark Irle, PhD, from the Ecole Supérieure du Bois in Nantes. The conference provided a summary of four years of activity in the field of wood-based panels, including raw materials, production, application and properties. The Action, apart from academia partners, had also industry partners, e.g. Chimar, Binderholz Group, Dynea, UPM-Kymmene Wood and Latvijas Finieris and other. The Polish delegates to the Action’s Management Committee were Jarosław Banecki, PhD (Wood Technology Institute, Poznań) and Professor Danuta Nicewicz (University of Life Sciences, Warsaw).

The Action had three Working Groups:

1. Process optimisation and process innovation,
2. Fundamentals and modelling,
3. Performance in use and new products.

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The Conference programme was divided into 3 parts, according to the field of interest of Action Working Groups. In the first part, dedicated to optimisation and innovation of processes, Professor Bunichiro Tomita, President of the Wood Technological Association in Japan, as a keynote speaker presented general terms of ecological survey of wood adhesives and brief history of formaldehyde emission concerns in Japan. He also presented two topics about advancement of technologies for reduction of formaldehyde release from wood based materials. Martin Ohlmeyer, PhD, from the Institute for Wood Biology and Wood Technology in Hamburg presented research showing that VOC and formaldehyde emission from plywood are affected by process parameters. In the same section Dorota Fuczek, MSc, from the Wood Technology Institute in Poznan, Poland, presented the possibilities offered by application of near infrared spectroscopy to characterisation of raw materials used for wood-based panel production. The main advantages of this method such as speed, simplicity and non-destructive testing, were confirmed by investigation carried out during a COST-supported Short Term Scientific Mission (STSM) in IVALSA, San Michele all'Adige, Italy. Sergej Medved, PhD, from the University of Ljubljana, Slovenia, presented the possibility of urea-formaldehyde resin substitution by liquefied wood during particleboard production; whereas Marek Grzeškiewicz, PhD, from the Warsaw University of Life Sciences, Poland, discussed the advantages and disadvantages of thermally modified veneers as raw material for laminate bending, panel finishing and plywood manufacture.

The activities of Working Group Two, devoted to Fundamentals and Modelling, were described by its leader, Heiko Thoemen, PhD, from the University of Hamburg, Germany. Lech Muszyński, PhD, a keynote speaker from the Oregon State University, USA, asked the following question: "Is what you see all you can get"? His presentation concerned bridging experimentation and modelling with advanced imaging techniques and the aim was to present a brief review of promising material characterisation techniques based on advanced imaging technologies and inverse problem methodology, which techniques seemed particularly suitable for complex heterogeneous composites study.

After the presentation of achievements of Working Group Three given by its leader Mizi Fan, PhD, from the Brunel University, the United Kingdom, the next keynote speaker, Robert Massen, PhD, from Baumer Inspection GmbH, Konstanz, Germany, gave a comprehensive presentation on the use of camera-based automatic visual inspection systems for flat panel-type materials. The core of this system is a multi-sensorial technology combining different camera and illumination modules to check both local and global physical and aesthetic defects. This was followed by a presentation from Ulrich Hilbers, University of Hamburg, Germany, on the use of ultrasonic velocity measurements to determine panel properties. Anti Rohumaa, Helsinki University, Finland, then gave a presentation on the use of a technique for following adhesive cure during hot press-

ing. José Gomes-Bueso, Dynea, Norway, made a presentation on how research is transferred from the laboratory to industrial application.

The last presentation was devoted to the Strategic Research Agenda for the Polish Forest-Based Sector. The speaker, Anna Woś, MSc, from the Wood Technology Institute in Poznan, Poland, emphasized that the above-mentioned strategy was prepared in connection with the Strategic Research Agenda (SRA) for the European Forest-Based Sector Technology Platform (FTP), and the research areas presented in the Polish Agenda result from previous experiences, Polish sectoral needs, existing international cooperation and traditions.

The conference was attended by 56 delegates from 21 countries.

During the closing ceremony, several remarks were made on the usefulness of COST Action E49 and the need to continue in some way and perhaps in the form of a follow-on Action. This initiative was undertaken by the team of scientist from the Wood Technology Institute in Poznan, Poland, who applied for the creation of an Action entitled “From fundamental research to applied science. Advanced and innovative wood-based panels produced by competitive industry”. The proposed Action acronym is WoodPan.

## **COST E49: ROZWÓJ I OSIĄGNIĘCIA W PŁYTACH DREWNOPOCHODNYCH – PODSUMOWANIE AKCJI I KONFERENCJA FINAŁOWA**

### **Streszczenie**

Finałowa konferencja Akcji COST E49 „Rozwój i osiągnięcia w płytach drewnopochodnych” odbyła się w dniach 14–15 września 2009 roku w Nantes, Francja. Na konferencji podsumowano czteroletnią działalność Akcji.

**Słowa kluczowe:** płyty drewnopochodne, współpraca naukowo-techniczna

