



# Second German WPC Congress

[www.wpc-kongress.de](http://www.wpc-kongress.de)

with exhibition and innovation award

4th till 5th December 2007, Maritim Hotel, Cologne

Congress languages: German/English with simultaneous translation



Wood plastic composites (WPC) are thermoplastically processible materials made from wood and plastics for the building, furniture, automotive, consumer goods, packaging, housing industry and other.

- Applications
- Market situation and trends
- Processing technique and material properties
- Research and Development
- Innovation awards – product and technique

Practice-oriented for developers, producers, traders and users

## Partners of the Second German WPC Congress:



DR. HANS KORTE  
INNOVATIONSBERATUNG HOLZ & FASERN



# WPC market is growing dynamically

Wood plastic composites (WPC) are a new material group that presently is developing dynamically worldwide with large growth rates. WPC are thermoplastically processible composites made from the renewable resource wood, in most cases synthetic plastics and additives. A typical WPC product for example is an extruded profile for a veranda decking, consisting of 70% wood flour, 25% polyethylene or polypropylene and 5% additives such as bonding agents, UV protective additives and colour pigments. In the German-speaking area that, with Germany, Austria and Switzerland, is the biggest WPC market in Europe, there are more than 25 WPC manufacturers with a fast growing production volume (approx. 20,000 t in the year of 2006).

## Congress and exhibition: Information and transfer platform between producers and users

With the congress and exhibition, all relevant WPC actors from Europe shall be brought together and internationally networked. There will be lectures and discussions on specific experiences, successes and problems in the German-speaking area, future chances and obstacles. In addition to the building industry, also the furniture and consumer goods industry are increasingly showing interest, further sectors shall be informed about these activities and encouraged to make use of the new material.

[www.wpc-kongress.de](http://www.wpc-kongress.de)

## Partners

For organising the congress, close cooperations with major associations, institutions and important actors were launched:

- Federation of Reinforced Plastics (Arbeitsgemeinschaft Verstärkte Kunststoffe – Technische Vereinigung e.V. (AVK-TV)), Frankfurt
- Bundesverband Deutscher Heimwerker-, Bau- und Gartenfachmärkte e.V. (BHB), Cologne
- Bundesverband Holz und Kunststoff (BHKH), Berlin
- German Society of Wood Research (DGfH), Munich
- European Bioplastics e.V., Berlin
- Agency for Renewable Resources (FNR), Gülzow
- German Timber Trade Federation (GDH), Wiesbaden
- University of Hamburg, Department of Wood Science
- Dr. Hans Korte – Innovationsberatung Holz & Fasern, Wismar
- University of Applied Sciences Bremen, Dept. for Biomimetics
- N-FibreBase
- Pro-K – Industrial association semi-finished products and consumer products made from plastics e.V., Frankfurt am Main
- Transfercenter für Kunststofftechnik (TCKT) – Upper Austrian Research GmbH (UAR), Linz (Austria)
- Association of the German furniture industries (VDM), Bad Honnef
- Association of the German wood-based panel industries (VHI), Gießen

preliminary

# Program to the

**Thursday, 04.12.2007**

## Introduction

- **Dr. Show-Ling Lee-Müller (Research Centre Jülich GmbH):**  
7th Framework programme of the EU for research and technological development (FP7): Overview of promotion possibilities in the field of „working materials“ (inquired)
- **Timo Grüneberg (Georg August University, Institute of Wood Biology & Wood Technology, Göttingen), Dr. Itana Radovanovic (Süddeutsche Kunststoffzentrum (SKZ), Würzburg):**  
Wood and plastics – The properties of raw materials for WPC

## Markets for WPC

- **Michael Carus (nova-Institut GmbH, Hürth):**  
Up-to-date market studies by nova-Institut on WPC and other biomaterials
- **Dr. Hans Korte (Innovationsberatung Holz und Fasern, Wismar):**  
Options with WPC board materials – Consideration of history and current trends
- **Dr. Harald Käb (European Bioplastics, Berlin):**  
Biobased polymers – An alternative market for persistent products?!

## WPC injection moulding

- **Christian Gahle (nova-Institut GmbH, Hürth):**  
PP-NF and WPC injection moulding in practice: Suppliers, series and pre-series applications, market volume and trends
- **Jörg Golombek (Werzalit GmbH & Co. KG, Oberstenfeld):**  
Specific aspects of WPC injection moulding: Technics and products
- **N.N. (IKEA, Schweden):**  
WPC injection moulding in furniture construction: Chairs for the global market (inquired)

## Surface design

- **Detlef Kleber (Institut für Holztechnologie Dresden gGmbH, Dresden):**  
Untersuchungen zur Flüssig- und Pulverlackierung von WPC
- **N.N. (University of Göttingen):**  
Plasma treatment of WPC (inquired)

## Special session: WPC Innovation Award

Six short presentations, each of 15 minutes:

### Introduction of the nominees

### Gala buffet and awards ceremony WPC Innovation Award

### Moderation:

Michael Carus, Managing Director of nova-Institut GmbH und Klaus Reifenhäuser, Managing Director of Reifenhäuser Extrusion GmbH & Co. KG



## Wednesday, 05.12.2007

### Standardisation and quality standards

- Dr. Peter Sauerwein (Association of the German Wood-Based Panel Industries e.V. (VHI), Gießen):  
Seal of approval for deckings from WPC
- Gabriel Cescutti (Faserinstitut Bremen e.V.), Cord Grashorn, (IST Ficotex, Bremen), Dr. Holger Fischer (Faserinstitut Bremen e.V.), Prof. Dr. Jörg Müssig (Hochschule Bremen, Professur Biologische Werkstoffe):  
Integrated quality management system for the control of wood particle and fibre degradation in WPC processing
- Alexander Reichert (Hochschule Wismar), Dr. Hans Korte (Innovationsberatung Holz und Fasern, Wismar):  
Methods of analysis for WPC

### Process optimisation

- Michael Elo (Gala Kunststoff und Kautschukmaschinen GmbH, Xanten):  
Production of WPC granulates with the Gala i-heat process
- Stefan Feige (Reifenhäuser Extrusion GmbH & Co. KG, Troisdorf), Gerhard Kosche (Kosche Profilummantelung GmbH, Much):  
Properties improvement through process optimisation (inquired)
- Dr. Eduard Kern (Kleine Wood & Fibre GmbH & Co. KG, Freudenberg):  
High-level radiation, discontinuous WPC conditioning, processes and properties

### Durability / Outdoor applications

- Katharina Plaschkies (Institut für Holztechnologie Dresden GmbH):  
Biologische Beständigkeit von Wood-Polymer-Composites im Außenbereich
- Dr. Liane Schulz, Dr. Christian Guckel (CIBA Specialty Chemicals, Schweiz):  
Additives: UV protective systems and their mode of action
- N.N.  
PVC as polymere basis for WPC in exposed fields of application (inquired)

Panel Discussion:

### Market chances and technical advantages and disadvantages of PVC as matrix for WPC

Moderation: Michael Carus (nova-Institut GmbH, Hürth)

Panellists from industry and science

### New developments: Raw materials – Techniques

- Dr. Christoph Burgstaller, Dr. Wolfgang Stadlbauer (TCKT – Transfercenter für Kunststofftechnik, UAR, Austria):  
Impact strength modification of wood plastic composites
- Dr. Andreas Weiss (J. Rettenmaier & Söhne GmbH + CO KG, Rosenberg):  
Innovative, functional wood fibres for the use of WPC
- Dirk Kruse, Dr. Anke Schirp, Prof. Dr.-Ing. Volker Thole (Fraunhofer-Institut für Holzforschung Wilhelm-Klauditz-Institut, Braunschweig):  
Production of WPC with improved fibre plastics bond
- Huong-Lan Nguyen, Andreas Haider, Uwe Müller, Michael Roth (Kompetenzzentrum Holz GmbH (Wood K plus) Austria) Hermann Braun, Andreas Endesfelder (AMI Agrolinz Melamine International GmbH, Austria):  
New wood/melamin resin composites in injection moulding and extrusion
- Rainer Bittermann (IFA Tulln, Austria), Markku Koivisto (UPM Kymmene, Finland):  
Papierfasern versus wood particles
- Benjamin Baudrit (Süddeutsches Kunststoff-Zentrum (SKZ – KFE gGmbH), Würzburg):  
Welding of WPC – different process

## Poster presentation, short presentations

Dr. Armin Merten, Dr. Itana Radovanovic, Kersten Kurda (Süddeutsches Kunststoffzentrum, Würzburg):

Quality assurance of WPC using the example of deckings for outdoor applications

Michael Hofmann

(CVP Clean Value Plastics GmbH, Buxtehude):

Recyclates in WPC (inquired)

Dr. Itana Radovanovic

(Süddeutsches Kunststoffzentrum, Würzburg):

Testing of an innovative technique for the processing of WPC – Direct extrusion on different compounding machines

Dipl. Holzwirtin Antonia Schröder, Prof. Dr. Harald

Hansmann (Hochschule Wismar), Dr. Hans Korte

(Innovationsberatung Holz und Fasern, Wismar):

WPC in rotomoulding with different kinds of wood

Daniel Schwendemann, Gerald Münch

(Coperion Werner & Pfleiderer, Stuttgart):

WPC process innovations (inquired)

[www.wpc-kongress.de](http://www.wpc-kongress.de)

## Innovation award

For the first time, an innovation award is jointly offered by nova-Institut and Reifenhäuser Extrusion: Product innovation and technique/process innovation.

The award aims at highlighting the present developments of the still young industry, thus embedding this material in the consciousness of engineers and decision makers. The award ceremony will take place in the framework of the gala buffet.

## Organiser

The nova-institute was founded in 1994 as a private, independent institute and deals with market research and economy in the department „Renewable Resources“. Particularly in the field of material utilisation of renewable resources such as natural fibres or wood in the automotive and building industry, nova-Institut has conducted numerous projects and studies. Since its foundation, in addition to scientific and consulting work nova-Institut has organised various trade congresses, seminars and workshops in the field of renewable resources.

### Contact partner

#### For programme, sponsors, exhibitors and participants

Christian Gahle, Tel. +49(0)2233 - 4814-48

E-Mail: christian.gahle@nova-institut.de

#### nova-Institut GmbH – Chemiepark Knapsack

Accommodation address visitor/mailing address

Industriestraße

50351 Hürth

50354 Hürth

[www.nova-institut.de/nr](http://www.nova-institut.de/nr)

Tel. +49(0)2233 - 4814-40, Fax: -50



## We thank our sponsors:



## Other sponsors are welcome!

## Media partners:

### Holz-Zentralblatt



## Exhibition

Along with the congress, an exhibition on the topic WPC – production, trade, applications and research & development will take place. **The exhibition can be visited only in conjunction with participation in the congress.**

The following exhibitors have already booked:

- ENTEX Rust & Mitschke GmbH, Bochum
- Fentech AG, St. Gallen (Switzerland)
- Fraunhofer-Institut für Holzforschung WKI, Braunschweig
- Kompetenzzentrum Holz GmbH, Linz (Austria)
- Kosche Profilummantelung GmbH, Much
- nova-Institut GmbH, Hürth
- Pallmann Maschinenfabrik GmbH & Co. KG, Zweibrücken
- PINUFIN Oberflächentechnik GmbH, Ulm
- Reifenhäuser GmbH & Co. KG, Troisdorf
- Reimelt Henschel MischSysteme GmbH, Kassel
- Transfercenter für Kunststofftechnik (TCKT) – Upper Austrian
- Research GmbH (UAR), Linz (Austria)
- Wöhler Brush Tech GmbH, Bad Wünnenberg

## Registration for the exhibition

Detailed information on the exhibition, such as an registration form, prices, booth systems and a floor plan you can find at [www.wpc-kongress.de](http://www.wpc-kongress.de) » exhibitors » Detailed Information for Exhibitors

[www.wpc-kongress.de](http://www.wpc-kongress.de)

Comfortable and easy registration at [www.wpc-kongress.de](http://www.wpc-kongress.de)  
or by Fax +49(0)2233 – 4814-50

<input type="checkbox"/> Congress with gala buffet	580,00 EUR
<input type="checkbox"/> Congress with gala buffet (special price for students)	290,00 EUR
<input type="checkbox"/> Only Tuesday, 04.12.2007 – without gala buffet	320,00 EUR
<input type="checkbox"/> Only Tuesday, 04.12.2007 – with gala buffet	355,00 EUR
<input type="checkbox"/> Only Wednesday, 05.12.2007	320,00 EUR
<input type="checkbox"/> Gala buffet only on Tuesday 04.12.2007	35,00 EUR

The legal VAT of 19% has  
to be added to all prices

Forename, surname \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

Postcode, place, country \_\_\_\_\_

Telephone \_\_\_\_\_

E-Mail \_\_\_\_\_

Internet \_\_\_\_\_

I don't want my entry to appear in the participant list visible to the public.