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Conference fee until 10 May 2014: Regular fee € 920.–
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 University Staff € 395.–
 Speaker/Poster exhibitor € 250.–
 (All prices plus German VAT)

Conference fee from 11 May 2014 on: Regular fee € 990.–
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 University Staff € 475.–
 Speaker/Poster exhibitor € 250.–
 (All prices plus German VAT)

- I agree to the conditions of attendance and hereby register **for participation** at the **10th Congress for Biobased Materials, Natural Fibres and WPC** in Fellbach/Stuttgart.
- I agree to the conditions of attendance and hereby register **as a poster exhibitor** for the **10th Congress for Biobased Materials, Natural Fibres and WPC** in Fellbach/Stuttgart.
- I would like to register for the **Networking Event** on 24 June 2014 (included in conference fee).

Participant:

Company address Private address

First name Name

Company

Industry Sector

Department Function

Street/P.O. Box

State/ZIP Code/City

Telephone Fax

E-Mail

Invoice address (if different):

Company address Private address

First name Name

Company

Street/P.O. Box

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www.biobased-materials.com

biobased materials

10th Congress for Biobased Materials,
 Natural Fibres and WPC

24 and 25 June 2014, Stuttgart/Fellbach

Grown
 global
 competence

Congress Coordinators

- Prof. Dr. Alexander Bismarck › Universität Wien, Austria
- Prof. Dr. Andrzej K. Bledzki
 › West Pomeranian University of Technology, Poland
- Dr. Christoph Burgstaller
 › Transfercenter für Kunststofftechnik GmbH, Austria
- Prof. Dr. Jörg Müssig › Hochschule Bremen, BIONIK, Germany
- Dr. Volker E. Sperber › Industrie Consultant, Germany
- Prof. Dr. Rupert Wimmer › Universität für Bodenkultur Wien, Austria

Target audience

The congress is intended for all producers, users and researchers of natural, cellulose fibre-reinforced and plastic composites, bioplastics and WPC. It attracts decision makers, researchers and experts as well as early career scientists.

Organized by **Kunststoffe** **Kunststoffe**
international

Exhibitors
 so far



10th Congress for Biobased Materials, Natural Fibres and WPC

For the 10th time, the **Congress for Biobased Materials, Natural Fibres and WPC** provides the platform for industrial researchers and engineers and academics to exchange and discuss the latest innovations, strategic questions and to present recent results.

Considering the advancements and future trends, the congress has expanded the focus from WPC to biobased composites and bioplastics and to renewable materials. The congress, which was initiated 1998 in Kassel, has helped to drive the expansion of applications of this group of materials. Over the years it has attracted a tremendous number of participants (in the recent years from 40 countries), which makes it one of the leading events in Europe.

This year, the congress will again be focusing on the extensive display of the newest levels of technology and best practices as well as the opportunity for intense cross-national discussions between industry and research.

In addition to oral presentations, there will be interactive poster presentations and industrial exhibitions with table top displays.

Congress Coordinators



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- Prof. Dr. Andrzej K. Bledzki › West Pomeranian University of Technology, Poland
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- Dr. Volker E. Sperber › Industrie Consultant, Germany
- Prof. Dr. Rupert Wimmer › Universität für Bodenkultur Wien, Austria

Topics

- Biological, biobased materials: bioplastics and biocomposites
- Natural and cellulose fibre-reinforced and innovative plastic composites
- Innovative processing and manufacturing methods for said materials and composites
- Additives and fillers for biobased materials and composites
- Innovative applications, for instance, in the furniture, construction, packaging, sporting goods, aircraft and automotive industries

Characteristics of the congress

- It brings together diverse research communities and experts that often meet only regionally: the congress engages the cross-national dialogue between research and industry
- It identifies challenges and key opportunities for expansion and applications for natural and cellulose fibre-reinforced and plastic composites, bioplastics and WPC
- It covers advancements and future trends

Exhibition

Apart from oral presentations, there will be an industrial exhibition with table top displays. The exhibition will take place on both days of the conference and is located in the lobby in front of the conference hall where the breaks will take place.

Grab the opportunity to play an active role in this high profile event and showcase your expertise. For further information, assistance and questions, please contact Nadine Völker, +49 89 99830-466, tagungen@hanser.de

Poster Session

On the first day of the conference, the program contains numerous interactive poster presentations, offering an ideal foundation for communication, while fostering direct contacts with the presenters. Latest data and samples can be discussed face-to-face.

Each poster will be presented to the plenum in a two-minute presentation and the best presenter will get a poster-prize.

Presented by



Tuesday, 24 June 2014

08.00 am Registration and welcome coffee

PLENUM

09.00 am **Welcome and introduction**

Congress Coordinators

09.15 am **Symbiosis of chemistry and biology: BASF's biodegradable and renewable polymers**

Prof. Dr. Andreas Künkel › BASF SE, Germany

09.45 am **Using natural fibre composites in high performance applications**

Prof. Kerry Kirwan, WMG › University of Warwick, United Kingdom

10.15 AM COFFEE BREAK

10.45 am **Changing the surface of wood with atmospheric plasma polymerization**

Prof. Karl Englund › Washington State University, USA

11.15 am **Nanocellulose materials – opportunities and challenges**

Prof. Lars Berglund › KTH Wallenberg Wood Sci Ctr, Sweden

11.45 am **Shaping the future with bioeconomy – raw materials, processes and products**

Prof. Dr. Thomas Hirth › Stuttgart University and Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik IGB, Germany

12.15 pm **Poster session**

Moderation: Dr. Volker Sperber, Industry Consultant, Germany

01.00 PM LUNCH

RENEWABLE MATERIALS 1

02.20 pm **Biopolymer Alloys for Durable Applications**

Mathew Crans, Altuglas International
› Arkema Group, France

02.45 pm **InnoREX – Latest results from European project about the metal free polymerisation of PLA using alternative energies for reactive extrusion**

Björn Bergmann › Fraunhofer Institute for Chemical Technology – ICT, Germany

03.10 pm **Layered cellulose fibre-reinforced polylactide composites inspired by natural structures**

Dr. Nina Graupner › Hochschule Bremen, Germany

03.35 pm **Effect of fibre surface modifications on microbial assimilation of sisal fibre reinforced PLA biocomposites**

Dr. Emma Strömberg › KTH Royal Institute of Technology, Fibre and Polymer Technology, Sweden

WPC

02.20 pm **Preparation of different Biobased Materials for WPC**

Lars Danzenbacher
› Pallmann Maschinenfabrik GmbH & Co. KG, Germany

02.45 pm **Kraft cellulose reinforced PP composites**

Philipp Dippold
› Kompetenzzentrum Holz GmbH, Austria

03.10 pm **Durability of water-based Coatings on Wood-Polymer Composite (WPC) Sidings**

Dr. Arne Schirp › Fraunhofer-Institut für Holzforschung › Wilhelm-Klauditz-Institut WKI

03.35 pm **Focus on durability and sustainability in the WPC industry**

Ing. Harald Zodl
› REHAU Polymer Industrie GmbH, Austria

04.00 PM COFFEE BREAK



Take the opportunity to visit the exhibition during the breaks. Enjoy snacks and coffee while discovering the latest products and developments!

RENEWABLE MATERIALS 2

04.30 pm **Recycling of Bioplastics: effects of multiple compounding and injection molding processes on the properties of PLA**

Blanca Lekube
› Transfercenter für Kunststofftechnik GmbH, Austria

04.55 pm **Bio-based polymer products – opportunities and limitations from a disposal and recycling perspective**

Dr.-Ing. Gunnar Hädrich › Knoten Weimar International Transfer Centre, Germany

05.20 pm **New eco-sustainable polyamide based polymers and compounds for multipurpose applications**

Nicolangelo Peduto
› RADICI CHIMICA & RADICI PLASTICS, Italy

05.45 pm **Edible Bioplastic for Dry Food Products**

Dr. Noryawati Mulyono
› Atma Jaya Catholic University, Indonesia

NATURAL FIBRE COMPOSITES

04.30 pm **Fibre orientation and its effect on the mechanical properties of the injection molded natural fibre reinforced PE-HD**

Päivi Lehtiniemi
› Tampere University of Technology, Finland

04.55 pm **Injection moulding simulation of natural fibre reinforced polymers – Fibre morphology and orientation in experiment and simulation**

Katharina Albrecht › Hochschule Bremen, Germany

05.20 pm **Composite reinforcement with hemp fibers**

NN

05.45 pm **Natural Fibers for Biomaterials**

Prof. Alcides Leao
› UNESP-College of Agricultural Sciences, Brazil

06.10 pm **End of first conference day**

NETWORKING EVENT

06.45 pm **Compliments to Prof. Dr. Andrzej K. Bledzki and opening of the Networking Event**

07.00 pm **Dinner Buffet**

Enjoy the Dinner Buffet. You will have the opportunity to benefit from the pleasant and relaxed atmosphere and to update your business contacts.

We will also offer the opportunity to watch the Soccer World Championship games in big screen.



Wednesday, 25 June 2014

PLENUM

- 08.15 am Presentation of the Poster Award**
After a careful screening of all posters the Committee will announce the poster award. The choice of the jury will be based on scientific excellence of the abstract and on the presentation of the scientific information on the poster and during the poster session.
- 08.30 am Biobased Technical Fibers and Composites – Trends and Case Studies**
Prof. Dr. Hans-Peter Fink and Dr. Johannes Ganster › Fraunhofer Institute for Applied Polymer Research (IAP), Germany
- 09.00 am Innovative Natural Fibre Polypropylene for Injection Moulding – Balancing cost, weight, performance and sustainability**
Michael Tranninger › Borealis Polyolefine GmbH, Austria
- 09.30 am Case: UPM Biocomposites – from recycling to superior composites**
Markku Koivisto › UPM ProFi Business Area, Finland

10.00 AM COFFEE BREAK

PROCESSING AND MANUFACTURING

- 10.30 am Energy efficient processing of cellulose fibre reinforced biobased polyamide**
Markus Brunkau › Zeppelin Systems GmbH, Germany
- 10.55 am Physical foaming of WPC – processing and mechanical properties**
Stefan Schierl › KraussMaffei Technologies GmbH, Germany
- 11.20 am Melt handling and pelletizing – specialized equipment and processing conditions for specific material properties**
Julia Ramge
› Automatik Plastics Machinery GmbH, Germany
- 11.45 am Solid decks conquer Europe – resulting in high performance extrusion and new challenges for machine manufacturers**
Sonja Kahr › Battenfeld-Cincinnati Austria GmbH, Austria

LEIGHT-WEIGHT AND STRUCTURAL PRODUCTS

- 10.30 am Foamed wood, a novel light weight bio-based material**
Hendrikus W. G. van Herwijnen › Wood K Plus, Austria
- 10.55 am Temporary constructions made with steel structure and recycled PVC-Coffee husk composite profiles**
Fabián Velandía › Woodpecker SAS, Colombia
- 11.20 am Component analysis of a fully implemented sectional WPC-beam with the tribologic value as sliding rail utilized in an overhead conveying system**
Dr.-Ing. Sven Eichhorn › TU Chemnitz, Germany
- 11.45 am Endless thread reinforcement using viscose (rayon) in biobased matrix materials**
Manuela Reinhardt › TU Chemnitz, Germany

12.10 PM LUNCH

LIGNIN AND BIOPLASTICS

- 01.30 pm Biobased Plastics – offering new opportunities**
Patrick Zimmermann › FKUR Kunststoff GmbH, Germany
- 01.55 pm Low Cost Co-Production of Hydrophobic Lignin Coated Cellulose Nanofibrils and/or Cellulose Nanocrystals with Biofuels**
Dr. Christos Sarigiannidis › American Process Inc., USA
- 02.20 pm A comparative study of polyethylene composites containing different lignins**
Denis Rodrigue › Université Laval, Canada

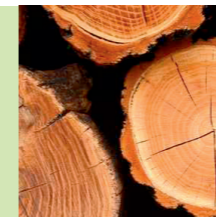
NEW OPPORTUNITIES

- 01.30 pm DIN CERTCO Certification Systems in the environmental fields: Getting Products Certified**
Dr. Oliver Ehlert › DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Germany
- 01.55 pm Quintessence of the EU-BioStruct Project – Materials and Processes for High-Value Applications**
Dr. Jan Diemert › Fraunhofer Institute for Chemical Technology – ICT, Germany
- 02.20 pm On the road to sustainable bio-based materials: A balancing act on environmental, economic and social factors**
Professor R. J. Murphy, Centre for Environmental Strategy
› University of Surrey, UK

02.45 AM COFFEE BREAK

PLENUM

- 03.15 pm Nanocellulose – towards applications**
Dr. Pia Quintus-Leino › VTT Technical Research Center, Finland
- 03.45 pm Markets in Asia and New developments**
Takeyasu Kikuchi › WPC Corporation, Japan
- 04.15 pm Concluding remarks**
Congress Coordinators
- 04.30 pm End of congress**



Details

- Contact** Carl Hanser Verlag · Lucia Femerling / Project Manager
Tel.: +49 89 99830-674 · Fax: +49 89 99830-157 · tagungen@hanser.de
- Location** Schwabenlandhalle · Tainer Strasse 7 · 70734 Fellbach/Germany · Tel.: +49 711 575610 · www.schwabenlandhalle.de
- Conference Fee** Registration fee until 10 May 2014: Regular fee € 920.– · Special rate for subscribers of *Kunststoffe* and *Kunststoffe international* and members of *kunststoffland NRW* and *AVK*: € 828.– · University Staff € 395.–
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Speaker/Poster exhibitor € 250.– (All prices plus German VAT)
- Benefits** The conference fee includes proceedings (download area), lunch, all refreshments during the conference and potential advised events. You will receive your name plate at the registration desk. Hereby the name plate is classified as authorization to call upon the mentioned benefits.
- Registration/Cancellation** Your registration is binding once a written confirmation is issued. This also applies to the participation in announced tours. With your signature, our terms and conditions are accepted. Participants with billing address outside of Germany, Austria and Switzerland, please pay by credit card.
Cancellation of your registration must be in writing and, up to two weeks prior to the start of the event, is subject to a processing fee of € 75.– plus the statutory VAT. Individuals whose cancellation is postmarked after the deadline are required to pay the full registration fee. It is, of course, also possible for a colleague to use your registration if you cannot attend personally. Should the conference be canceled, the registration fee will be reimbursed in full. We will inform you immediately and transfer the paid fee back to your account. However, Hanser will not be liable for any other expenses incurred, such as travel, hotel, or others. The program is subject to changes.
- Exhibition** There will be a supplemental exhibition. Are you interested in becoming an exhibitor? Contact us!
Tel.: +49 89 99830-466 or tagungen@hanser.de
- Accommodation** Transfer and overnight-stay are not included in the conference fee. A limited number of rooms at a reduced price is available for participants. Please book your accommodation yourself (reference: "Hanser Verlag").
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Tainer Strasse 7-9 · 70734 Fellbach · Germany · Tel.: +49 711 5859-0 · www.bestwestern-fellbach.de
23-25 June 2014: Single room € 129.– incl. breakfast
Hotel ibis Styles Stuttgart (about 6 km away from Schwabenlandhalle)
Teinacher Strasse 20 · 70372 Stuttgart, Germany · Tel.: +49 711 95400 · www.ibis.com/Stuttgart
23-24 June 2014: Single room € 99.– incl. breakfast · 24-25 June 2014: Single room € 129.– incl. breakfast
- Journey** For your journey by train you can use the cost-efficient event ticket of "DB Vertrieb GmbH". You can find detailed information about the offer on www.hanser-tagungen.de/DBSonderkonditionen. The offer is bookable under the hotline +49 1805 311153. Please use the reference "EW".
- Our detailed terms and conditions can be found at www.hanser-tagungen.de/agb**