6. Biowerkstoff-Kongress



# on Industrial Biotechnology and Bio-based Plastics & Composites

10 - 12 April 2013, Maternushaus, Cologne, Germany

KBBPPS Project - 1st Advisory Workshop, 9 April 2013

Highlights from the worldwide leading Countries in Bio-based Economy: USA & Germany



Organiser



www.nova-institute.eu www.hs-bremen.de

In Cooperation with

The Biological Materials Group

HOCHSCHULE BREMEN
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#### 1<sup>st</sup> KBBPPS Advisory Workshop

#### KBBPPS - Knowledge Based Bio-based Products' Pre-Standardization

#### What is the project about?

The aim of the European Union's FP7 project is to execute pre- and co-normative research, which will be used directly in the CEN standardization process on the same topic. This will provide the European and global market with horizontal standards on biocarbon and biomass content as well as biodegradability that have been assessed on a first set of selected bio-based products, such as solvents, plastics and lubricants.

For more information about the project, please visit **www.kbbpps.eu** 

#### What is the workshop about?

This workshop, which will be organized in conjunction with the main conference, is the first of overall three advisory workshops that will be held within the KBBPPS project. In this first workshop the project's objectives and scope as well as the first steps that have already been taken will be presented. Then an interactive discussion will take place, in which relevant stakeholders and experts from science, industry, policy, certification bodies and consumer organisations are invited to share their views and expertise on standardization of bio-based products.

# Don't miss this opportunity to receive first-hand information on the recent standardization research in the EU!

You will find more information about the 1st Advisory Workshop at www.bio-based.eu/kbbpps

This project is funded by the European Commission's Seventh Framework Programme for Research and Technological Development.



DISCOUNT OFFER FOR

WORKSHOP PARTICIPANTS:

10% discount on the Conference
on 10–12 April 2013

Entrance Fee

Workshop incl.
Catering € 75

plus 19 % VAT.

#### 9 April 2013

#### From 10:30h-17:30h, Maternushaus, Cologne, Germany

# 10.30 The Netherlands Standardization Institute (NEN), Ortwin Costenoble

Welcome to the KBBPPS 1st Advisory Workshop Goal of the workshop

# 10:40 The Netherlands Standardization Institute (NEN), Ortwin Costenoble

Project overview - Scope and Milestones

#### 11:00 Michigan State University

Prof. Dr. Narayan Ramani

Carbon14, what is and how is it measured?

# 11:20 The Energy research Centre of the Netherlands (ECN), Frits Bakker

Bio-based carbon content – Plan, Intentions and Latest Activities, especially regarding the overview of current relevant standards on global level Questions and feedback

#### 11:55 University of York, Tom Farmer

Biomass content – Plan, Intentions and Latest Activities, especially regarding sampling and fractionation Questions and feedback

#### 12:30 Lunch break

#### 13:30 EuropaBio, Antoine Peeters

What does industry expect from the KBBPPS project?

#### 14:00 nova-Institut GmbH, Lena Scholz,

Adriana Sanz Mirabal

Identification of the bio-based products to investigate – Plan, Intentions and Latest Activities Questions and feedback

#### 14:35 Organic Waste Systems (OWS), Bruno De Wilde

Biodegradability – Plan, Intentions and Latest Activities, including an overview of existing standards Questions and feedback

#### 15:05 Tea Break

# 15:45 The Netherlands Standardization Institute (NEN), Ortwin Costenoble

How can we manage international outreach? – Discussion with the workshop participants

16:30 Open Discussion – KBBPPS Guidelines and Strategy within the project's boundaries

# Int. Conference 2013 on Industrial Biotechnology and **Bio-based Plastics & Composites**



10 - 12 April 2013, Maternushaus, Cologne, Germany

#### **Programme**

#### 1st Day, 10 April 2013

- 09:30 Registration and welcome coffee
- 10:00 Conference Opening, nova-Institut GmbH, Germany, **Michael Carus**

#### **POLICY & STRATEGY FOR A BIO-BASED ECONOMY**

- 10:15 U.S. Department of Agriculture (USDA), USA, **Ron Buckhalt** Bio-based Product Opportunities and Federal Support
- 10:45 **Bioeconomy Council** (of the Federal Government of Germany), Germany, Prof. Dr. Christine Lang Bio-based Economy in Germany: Status and Outlook
- 11:15 BIO, USA, Dr. Rina Singh Bio-based Strategy and Political Framework in the USA
- 11:45 CLIB 2021, Germany, Dr. Manfred Kircher Feedstock Flexibility in Bioeconomy
- 12:15 Lunch Break
- 13:30 European Bioplastics e.V., Germany, **Kristy-Barbara Lange** Environmental communications for bioplastics
- 13:50 The German Association of Biotechnology Industries, Germany, Dr. Ricardo Gent The Innovative field of Biotechnology: Expectations, Perspectives and Activities of the German Association of Biotechnology Industries
- 14:10 Beta Analytic Ltd., USA, Alexander Shroff Carbon 14, what is it and how is it measured?
- 14:30 DIN CERTCO, Germany, Dr. Oliver Ehlert Certification scheme for Bio-based Products
- 14:50 Coffee Break

#### **BIO-BASED BUILDING BLOCKS**

- 15:20 Myriant Technologies, USA, Dr. Michael Mang Commercializing Bio-based Chemicals Applications
- 15:40 Clariant Produkte (Deutschland) GmbH, Germany, Dr. Clemens Heikaus Biotech Renewable Center: Germany's largest cellulose Ethanol Plant
- 16:00 BASF SE, Germany, Prof. Dr. Andreas Künkel Symbiosis of Chemistry and Biology: BASF's Biodegradable and Renewable Polymers



Innovation Award ceremony 2011. From left to right: Peter von Hoffmann (Coperion GmbH), Michael Carus (nova-Institut GmbH), Richard Hurding (OMODO GmbH), Christine Schmidt (nova-Institut GmbH).

#### **Innovation Award** "Bio-based Material of the year 2013"

For the sixth year running an innovation award will be awarded to the young, innovative bio-based chemicals and materials industry, along with suitable applications and markets for bio-based products exclusively coming from USA and Germany this time round. The focus of the award is on new developments within these areas, which have had a market launch in 2012 and 2013.

Sponsor of the Innovation Award is Coperion GmbH, worldwide market and technology leader in compounding & extrusion, materials handling and service:

www.coperion.com



#### **INNOVATION AWARD: HIGHLIGHTS FROM USA & GERMANY**

- 16:40 Coperion GmbH, Germany, Uta Kühnen Compounding of bio-based Polymers. Basics and Trend
- 17:00 Presentation of the 6 nominated and election of the innovation award winner For more details please visit the conference website www.bio-based.eu/conference
- 20:30 Dinner Buffet and Innovation Award

16:20 N.N. USA

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#### **Programme**

#### 2<sup>nd</sup> Day, 11 April 2013

### BIO-BASED PLASTICS & POLYMERS: PAST AND FUTURE

09:00 Institut für Kunststofftechnik (IKT), Germany,
Prof. Dr.-Ing. Christian Bonten
History and Future of Bio-based Plastics

09:20 **nova-Institut GmbH, Germany, Michael Carus**Market Study on Bio-based Polymers in the World

09:40 **WWF, USA, Erin Simon**Conservation and the Bio Economy

10:00 Coffee Break

#### **BIO-BASED POLYMERS ON THE RISE**

10:30 **DuPont, USA, Dr. Karlheinz Hausmann**DuPont Bio-based Polymer Platform

11:00 Bayer MaterialScience, Germany, Dr. Niklas Meine Bio-based Polyurethanes on the rise

11:30 NatureWorks LLC, USA, Erwin Vink IngeoTM Biopolymers: one of the building Blocks in a more Sustainable Bio-Economy

12:00 Evonik Industries AG, Germany, Dr. Jasmin Nitsche Bio-based high-performance Polyamides

12:30 Lunch Break

## BIO-BASED COMPOSITES FOR AUTOMOTIVE APPLICATIONS

14:00 Johann Borgers GmbH & Co. KG, Germany, Dipl. Ing. Michael Kalweit Bio-Composites in automotive and other applications – Latest Trends and Developments

14:30 FlexForm Technologies LLC, USA, Gregg Baumbaugh Putting Natural Fiber to Work

15:00 Coffee Break

#### **Exhibition Bio-based Plastics and Composites**

Use the extraordinary chance to present your company and your products at the conference with an exhibition stand! Prices starting at 800€. We would be glad to provide you with a nonbinding offer, please contact: Dominik Vogt, dominik.vogt@nova-institut.de

#### PARALLEL SESSIONS PROGRAMME

### LEADING BIO-BASED PLASTICS SMES

15:30 Tecnaro GmbH,
Germany,
Dr. Lars Ziegler
Thermoplastic
Polymers from

16:00 FKuR Kunststoff GmbH, Germany, Carmen Michels Plastics made by Nature

Renewable Resources

16:30 Biotec GmbH & Co. KG, Germany, Dr. Christoph Heß

Biotec's range of Bioplastic Resins

17:00 N.N. USA

#### BIOMIMETICS – LEARNING FROM NATURE

15:30 University of Applied Sciences Bremen, Germany,
Prof. Dr. Jörg Müssig
Natural Fibres:
Function in Nature

16:00 University of California, Berkeley, USA, Prof. Dr. Robert O. Ritchie Nature-inspired structural Materials

16:30 Research Campus Golm,
Germany,
Prof. Dr. Peter Fratzl
Biomimetic Materials
Research:
Inspiration from nature's
structural materials

17:00 University of Bayreuth,
Germany,
Prof. Dr. Thomas Scheibel
Spider Silk Proteins for
Applications in Biomaterials

#### PANEL DISCUSSION

18:00 Challenges and Future of Bio-based Economy

19:00 Coming together

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#### **Programme**



#### 3rd Day, 12 April 2013

### BIO-BASED PLASTICS: TRENDS AND ENVIRONMENTAL EVALUATION

09:00 University of Applied Science Hanover, Germany,
 Prof. Dr. Hans-Josef Endres
 Bioplastics-Opportunities, Bottlenecks and
 Perspectives

09:30 Michigan State University, USA, Prof. Dr. Narayan Ramani Understanding and reading LCAs

10:00 Coffee Break

#### **NATURAL FIBRES & BIO-BASED COMPOSITES**

- 10:30 Cornell University, USA, Prof. Dr. Anil Netravali Green Composites
- 11:00 Fraunhofer Institute for Applied Polymer Research IAP, Germany, Dr. Gunnar Engelmann Lignin – more than a simple filler for thermoplastics?
- 11:30 University of Texas, USA, Prof. Dr. Jonathan Y. Chen Functional Fiber, Film, and Composite from Raw Cellulose
- 12:00 **Light Light Solutions, LLC., USA, Prof. Dr. Danny Akin** Linen most useful The Versality of the Flax Plant
- 12:30 Lunch Break

#### **INDUSTRIAL BIOTECHNOLOGY**

13:30 WSU Institute for Biological Chemistry, USA, Prof. Dr. Norman G. Lewis Plant Biotechnology: New Routes to Polymer Building Blocks and Specialty Chemicals

14:00 Research Institut Biopos, Germany, Prof. Dr. Birgit Kamm Biorefinery Processes for Production of Intermediates and Bio-based Polymers

14:30 Institute for Interfacial Engineering,
University of Stuttgart – Fraunhofer Institute for
Interfacial Engineering and Biotechnology, Germany,
Prof. Dr. Thomas Hirth
The Leuna Biorefinery Project – Integration of
biotechnological and chemical Processes

15:00 N.N., USA

15:30 Coffee & Snacks



# Special collaboration between the nova-Institute and CLIB2021!

Two special events will take place in cooperation: The 6th International Conference on Industrial Biotechnology and Bio-based Plastics and the CLIB International Conference 2013 (CIC 2013) on 17–18 April 2013 at the Radisson Blu Scandinavia Hotel in Düsseldorf. Persons who would like to attend both these events that lie so closely together in time and venue, receive a discount of 10%. Especially for international participants this provides a chance to visit two congresses with one journey, which complement each other and offer a complete overview of the status-quo of industrial biotechnology.

Participants of the 6th International Conference on Industrial Biotechnology and Bio-based Plastics can get the 10% Discount

for CIC 2013 by choosing the corresponding option during the online registration:

www.clib2021.de/en/events/clib-conference



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You can find all conferences and information of the www.bio-based.eu

#### **Your Conference Team**



Michael Carus CEO nova-Institute GmbH



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# Venue

Maternushaus Cologne Kardinal-Frings-Str. 1-3 50668 Cologne, Germany Phone: +49 (0) 221 16 310 E-Mail: info@maternushaus.de

The venue is 10 minutes walking distance from the central station and 30 minutes distance by train from Cologne/Bonn airport.

# Highlights from the worldwide leading countries in Bio-based Economy: USA & Germany

To what extent has the bio-based economy really taken root in practice? What strategies are there for the years to come?

Germany and the USA are world leaders in the chemical and plastics industries. Both countries have comprehensive funding schemes in place for research and development in the fields of bio-based chemicals and plastics, but investment and market presence are also showing double-figure growth.

This conference aims to provide major players from the US and German bio-based chemicals and plastics industries with an opportunity to present and discuss their latest developments and strategies. Representatives of political bodies and associations will also have their say alongside leading companies. For the very first time, the conference will count with a third day especially dedicated to the latest research activities in the field of industrial biotechnology & bio-based plastics. More than 250 participants mainly from industry are expected!

#### **Partner**



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#### **Entrance Fee**

Conference incl. Catering, plus 19 % VAT

KBBPPS Workshop 9 April 2013	1 <sup>st</sup> Day Conference 10 April 2013	2 <sup>nd</sup> Day Conference 11 April 2013	3 <sup>rd</sup> Day Conference 12 April 2013
75 €	450 €	400 €	350 € *
	750 €		
		700 €	
	900 €		
For Workshop participants: 10% Discount on all Conference Fees			

\*Inclusive parallel session on 11 April 2013