









## nova International Congress

# Raw Material Shift & Biomaterials

www.raw-material-shift.info

December 3<sup>rd</sup> and 4<sup>th</sup>, 2008 Maritim Hotel, Cologne

Congress languages: German/English simultaneous translation



## The congress will focus on

#### **Raw Material Shift**

- Fossil and mineral resource (price) crisis
- Global resource-problem
- What can agricultural resources accomplish as an alternative?
- Trends of the most important agricultural and wood resources

#### **Biomaterials**

- bioplastics, natural fibre (bio-) composites, Wood-Plastic-Composites (WPC)
- National and global markets
- Technologies and methods
- Industries and applications

Partner of the congress









Be a sponsor or partner of the congress:

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## **Raw Material Shift**

Since 2002 after 40 years of price decline, fossil and mineral resources are experiencing a continuous and rapid price increase with no end in sight. Also included in the Raw Material Shift is the increased use of Renewable Resources in the industry as a substitution for fossil and mineral resources.

With fossil and mineral resources becoming more and more scarce, could the growing use of agricultural and forest resources be a loophole for the world industry? What can agricultural resources accomplish as a resource basis for the industry especially in the content of the current food crisis?

## **Biomaterials**

The use of Renewable Resources for energy is currently experiencing a blowback and there are definitely better ways in the near future of producing energy whereas there are no alternatives to the increased material use of agricultural resources.

Biomaterials are a new material group defining itself by its agricultural and forest resource basis. Degradable and non-degradble bioplastics, Natural Fibre (Bio-) Composites (NFC) and Wood-Plastic-Composites (WPC) are included in this material group.

The industrial biotechnology will play an important role in the production and development of biomaterials in the future.

#### Partner of the congress:

- CLIB<sup>2021</sup> Cluster industrial biotechnology North Rhine-Westphalia including industry, SME and academics; www.clib2021.com
- European Bioplastics e.V. Branch association representing industrial manufacturers, processors and users of bioplastics and biodegradable polymers (BDP) and their derivative products; www.european-bioplastics.org
- Association of the German Wood-Based Panel Industries (VHI) - Representation of the manufacturers of particleboards, MDF, and OSB as well as plywood and internal doors; www.vhi.de

## preliminary

## Programme of the "International Congr

1<sup>st</sup> day - 3. 12. 2008

# Raw Material Shift - Changed framework for the resource supply of the industry

Moderator: Dr. Thomas Breuer (Deutsche Gesellschaft für Technische Zusammenarbeit GmbH - GTZ)

1<sup>st</sup> session: Global commodity (price) crisis

- Hilmar Rempel (Federal Institute for Geosciences and Natural Resources (BGR), Hannover)
  Availability of fossil and mineral resources in the context of the rising world demand - trends and developments
- Jochen Hitzfeld (HypoVereinsbank UniCredit Group AG, Munich)
  Commodities, the new asset class: preview 2009
- Matthias Fawer (Bank Sarasin & Cie AG, Basel) & Matthias v. Armansperg (Syntegra-Solar Ltd., Offenhach)

Medium-term potentials of the worldwide solar energy use and its influence on the energy use of biomass

2<sup>nd</sup> session: What can renewable resources accomplish as a future alternative?

- Michael Carus (nova-Institut GmbH, Huerth)
  Raw material shift: commodity (price) crisis, causes and consequences
- Prof. Dr. Folkhard Isermeyer (Johann Heinrich von Thünen-Institut, Braunschweig) Current and future availability of agricultural resources on the world markets

3<sup>rd</sup> session: Important agricultural and forest resources: Global and national markets, prices, trends and applications

Dr. Klaus-D. Kibat (Verband Deutscher Papierfabriken e.V., Bonn)

Wood and pulp - an important resource for the paper industry: material vs. energy use

N.N.

Future importance of natural fibres for the industry

- Volker Capitain (Tate & Lyle PLC, Wittlich)
  Starch as a resource for the industry: markets, applications and price trends
- Dr. Hugo Ahlfeld (F. O. Licht GmbH, Ratzeburg) Sugar as a resource for the industry: markets, applications and price trends
- Dr. Karlheinz Hill (Cognis GmbH, Duesseldorf) Vegetable oils as raw materials for industrial applications

#### ess Raw Material Shift & Biomaterials"

■ Dr. Michael Keßler (Weber & Schaer GmbH & Co. KG, Hamburg)

Rubber for the industry - never has it been more precious

Innovation Award - Biomaterial of the Year Voting and bestowal before and during the dinner buffet

## 2<sup>nd</sup> day - 4. 12. 2008

#### **Biomaterials**

biomaterials

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

1st session: Biomaterials - Marekts and innovations

- Christian Gahle (nova-Institut GmbH, Huerth)
  Biomaterials materials of the future: current market data and attractive product samples
- Dr. Manfred Kircher (Evonik Industries AG und CLIB<sup>2021</sup>, Marl) Industrial biotechnology and its potentials for
- Mikael Lindstrom (STFI-Packforsk AB, Stockholm)
  The biorefinery as a source for renewable materials from technology push to market pull
- Prof. Dr.-Ing. Jörg Müssig (Hochschule Bremen, BIONIK)
  Bionik From nature to biomaterials

#### 2<sup>nd</sup> session: Biomaterials in the automobile industry

- Maira Magnani (Ford Forschungszentrum Aachen) Renewable material application in Ford Motor Company vehicles
- Dr. Eugen Prömper (Johnson Controls Interiors & Co. KG, Grefrath)

Natural and wood fibre composites and bioplastics for the automobile interior - a success story

## 3<sup>rd</sup> session: Biomaterials in the construction and furniture industry

- Alexandre Pereira (Amorim Group, Mozelos, Portugal) Cork - from a traditional product to a modern building material for the industry
- Dr. Christian Bonten (FKuR Kunststoff GmbH, Willich) (inquired)

Wood-Plastic-Composites (WPC) - a wooden material of the plastic industry

## 4<sup>th</sup> session: Biomaterials in the agricultural, packaging and consumer industry

- Jöran Reske (European Bioplastics e.V., Berlin) Bioplastics - producers, applications and markets
- Christopher Straeter (3N & Forschungsgemeinschaft Biologisch Abbaubare Werkstoffe e.V. (FBAW), Hannover)

Bioplastics in the agricultural industry – successful market introduction of biologically degradable planting pots and mulch film

## Convenient and easy registration at www.raw-material-shift.info

➤ Congress, 3. & 4.12.2008	
incl. dinner buffet	650,00 EUR

Congress, 3. & 4.12.2008
incl. gala dinner buffet (student) 300.00 EUR

⇒ 3.12.2008 only incl. gala dinner buffet 400,00 EUR

⇒ 3.12.2008 only excl. gala dinner buffet 350,00 EUR

→ 4.12.2008 only excl. gala dinner buffet 350,00 EUR

➡ Gala dinner buffet (buffet and beverages) only, 3.12.2008 50,00 EUR

All prices exclusive of VAT

#### **Organizer**

The nova-Institut was founded in 1994 as a private and independant institute. One major focus of the department "economy and resources" are the current global resource problems with the main research on Renewable Resources. The department "biomaterials" is specialised in the study of the material use of Renewable Resources like natural fibres, wood and bioplastics for the automobile and construction industry. Within its professions the nova-Institut has conducted numerous projects as well as market and feasibility studies.

Since its foundation the institute has organised many professional congresses, seminars and workshops alongside the scientific and consultancy work

#### Contact for the Programme, Sponsoring, Exhibitors and Participants

nova-Institut GmbH – Chemiepark Knapsack Industriestraße, 50354 Hürth, Germany

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## Innovation Award -Biomaterial of the Year

For the first time, an innovation award is offered for the new material group of biomaterials including bioplastics, natural fibre (bio-)composites and Wood-Plastic-Composites (WPC). 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 presentation and award ceremony will take place in the framework of the International Congress Raw Material Shift & Biomaterials (3<sup>rd</sup> and 4<sup>th</sup> December 2008, www.rohstoffwende.de) in Cologne.

The innovation award wants to sensitise the biomaterial branch - but also interested companies from outside the industry - to innovative ideas in both the product development and product design sector, as well as to the realisation of new technologies, methods, tools and formulations. In practical terms, the competition shall stimulate the development of new applications that are appropriate for the materials involved and markets for biomaterials.

The awards ceremony will be held in a festive atmosphere at a gala dinner in the congress hall of the renowned Maritim hotel in Cologne on the occasion of the International Congress Raw Material Shift & Biomaterials.

The "top 3" of the received applications exhibit their innovations on a shared exhibition area and get free entrance as well as the possibility to present their innovations at the congress in the form of short lectures. The "top 3" of the received appllications and their innovations will be highlighted in the media work and added to the congress documents.

As a matter of course, the competition documents are treated strictly confidential so that any first time presentation at any other occasion will not be endangered.

A jury consisting of representatives from nova-Institut as well as representatives from other partners will nominate the especially outstanding "top 3"; the voting of the "1st place" will be done by a vote of all trade visitors on the first event day.

Please note: Cash refunding of the price or the free tikket, as well as setting these of against other services by nova-Institut GmbH and its partners are not possible; there is no right of appeal.

The participants are expected to file a two DIN A4 page description of their product or their innovation as well as printable picture material in digital form. The accompanying letter has to make clear what kind of price is aimed at and what constitutes the innovation according to the appraisal criteria. If technically possible, the product itself should also be sent.

#### Filing deadline is 30 September 2008.

#### Please address the documents to:

nova-Institut GmbH

Keyword: Innovation-Award - Biomaterial of the Year Chemiepark Knapsack

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#### It's time for the Business Directory for Innovative Biomaterials

The Business directory for Innovative Biomaterials BIB'09 will provide all prospective customers a comprehensive survey of the total market of novel biomaterials: producers and suppliers of biomaterials and the products, manufactured from biomaterials take centre stage.

The term "biomaterials" has been established for only a few years and encompasses a wide range of new bio-based materials. Biomaterials are materials which are based on agricultural raw materials or timber, either completely or to relevant proportion. Typical agricultural raw materials – in this context also called "Renewable Resources" – are for example starch, sugar, vegetable oils and cellulose (timber, natural fibres, straw) and special bio-molecules such as lignin or natural rubber. The proportion of these agricultural raw materials in the material should be at least 20 %.

In contrast to traditional biomaterials such as particle boards or plywood, "novel" or "innovative" biomaterials are often converted by modern plastic processing procedures such as extrusion, injection moulding, deep drawing or blown film.

After more than twenty years of research and development, biomaterials have exhibited an increasing market potential during the last five years and they are also beginning to establish on the mass market, based on special applications. However, they still share the challenge of all innovative newcomers; They entail high investments and are, in their multiplicity, little-known by decision-makers from industry and policy, as well as consumers. With the release of the Business Directory, the initiator of **BIB'09** offers a combined platform for all biomaterials.

Each company listed in BIB'09 provides ongoing biomaterials and accordant products in relevant amounts on the market. Beside producers also suppliers of raw materials, engineering companies, organisations and research facilities, which operate in the rough area of biomaterials, will be affiliated in BIB'09.

BIB'09 will be released by the nova-Institut GmbH, the communication-agency Scheben, Scheurer & Partner GmbH (SSP) and the University of applied sciences Bremen (Professorship Biological Materials/ BIONIK). The circulation figure of the BIB'09 will be at least 5.000, it will be available for free.

Use this opportunity for promotion now! Further information, how to contact the publisher of BIB'09 and the registration form can be found on the website www.biowerkstoff.info.

The BIB'09 will be launched at the International Congress on Raw Material Shift & Biomaterials (www.raw-material-shift.info), December 3rd and 4th 2008, in Cologne.





