



DECHEMA

Gesellschaft für Chemische Technik
und Biotechnologie e.V.

PROGRAMME AND INVITATION FOR POSTER SUBMISSION

February 14 – 15, 2012

DECHEMA-House, Frankfurt am Main

Industrial Use of Renewable Raw Materials: Chemistry, Biotechnology, Process Engineering

www.dechema.de/bioref2012



ORGANIZERS

PROCESSNET
EINE INITIATIVE VON DECHEMA UND VDI-GVC

GDCh

DBU
Deutsche Bundesstiftung Umwelt



VCI
Verband der
Chemischen
Industrie e.V.



**Chimie
du Végétal**
in association with

The change of the raw material basis in the chemical industry becomes more and more reality. Strategies for the intensified use of bio-based products are developed in Germany and the EU with regard to 2020. Funding programmes for the creation of sustainable value chains using biomass are currently developed. Prerequisites for the change to a low carbon economy or bio-economy are – aside from access to sustainable produced biomass – efficient treatment and refining technologies for the provision of platform chemicals, which could be used in well established value chains of the chemical industry.

This symposium is targeting experts from industrial and academic research, who are involved in the chemical use of renewable resources. Innovative solutions for raw material production, biomass treatment and process engineering along the value chain will be presented.

A special highlight of the conference will be the presentation of large national and European research projects for the development of innovative biorefinery concepts.

An exhibition which accompanies the conference will be an opportunity for companies to present innovative processes and solutions. The scientific committee invites all participants to submit abstracts for posters in following fields:

- » Bio-economy
- » Sustainability in the cultivation of renewable resources
- » Biorefinery concepts
- » Pretreatment and conversion of biomass
- » Platform chemicals from renewable raw materials
- » Bio-based products

Thomas Hirth

Chair of the ProcessNet
Working Group „Renewable Raw
Materials for the Chemical Industry“

Roland Ulber

Chair of the DECHEMA-Subject Division
“Biotechnology of Renewable Raw
Materials“

ORGANIZING COMMITTEE

Rainer Busch	Technologie- und Innovationsberatung, Baden-Baden
Maximilian Hempel	Deutsche Bundesstiftung Umwelt, Osnabrück
Wolfram Koch	Gesellschaft Deutscher Chemiker e.V., Frankfurt am Main
Thomas Hirth	Universität Stuttgart and Fraunhofer IGB, Stuttgart
Rolf Luther	Fuchs Europe Schmierstoffe GmbH, Mannheim
Jochen Michels	DECHEMA e.V., Frankfurt am Main
Dietmar Peters	Fachagentur Nachwachsende Rohstoffe e.V., Gülzow
Andreas Rivas Nass	Umicore AG & Co. KG, Hanau
Jörg Rothermel	VCI e.V., Frankfurt am Main
Christine Stiehl	BASF SE, Ludwigshafen
Roland Ulber	TU Kaiserslautern
Wolfgang Wach	Südzucker AG, Obrigheim
Kurt Wagemann	DECHEMA e.V., Frankfurt am Main
Dietrich Wittmeyer	ERRMA, Langen
Dieter Wullbrandt	Nordzucker AG, Braunschweig

A joint conference of the ProcessNet Working Group “Renewable Raw Materials for the Chemical Industry“ together with the DECHEMA-Subject Division “Biotechnology of Renewable Raw Materials“

Tuesday, February 14, 2012

- 09:15 **Welcome and introduction**
K. Wagemann, DECHEMA e.V., Frankfurt/D
T. Hirth, University of Stuttgart/D and Fraunhofer IGB, Stuttgart/D

Policies and frameworks

Chair: T. Hirth, University of Stuttgart/D and Fraunhofer IGB, Stuttgart/D

- 09:30 **Biotechnology and the bioeconomy: towards the horizon 2020**
A. Aguilar, European Commission (SDME 8/42), Brussels/B

- 10:00 **TANDEM-LECTURE**
Implementation of the recommendations of the European Lead Market Initiative for Bio-Based Products in the frame of European Innovation Partnerships
D. Wittmeyer, European Renewable Resources and Materials Association, Langen/D; C. Stiehl, BASF SE, Ludwigshafen/D

- 10:30 **The concept of bio-economy – recommendations of the Bioeconomy Council**
R. Hüttel, Bioeconomy Research and Technology Council, Berlin/D

11:00 **Coffee Break**

- 11:30 **National Research Strategy BioEconomy 2030**
H. van Liempt, Federal Ministry of Education and Research, Berlin/D

- 12:00 **TANDEM-LECTURE**
The German Roadmap Biorefineries
K. Wagemann, DECHEMA e.V., Frankfurt/D;
D. Peters, Fachagentur Nachwachsende Rohstoffe e.V., Gülzow/D

Sustainable cultivation of renewable raw materials

Chair: D. Peters, Fachagentur Nachwachsende Rohstoffe e.V., Gülzow/D

- 12:30 **Greenhouse gas fluxes and soil carbon stock changes in the cultivation of energy crop used for biogas production**
J. Augustin, Leibniz-Zentrum für Agrarlandschafts- und Landnutzungsforschung (ZALF) e.V., Müncheberg/D

13:00 **Lunch Break**

Tuesday, February 14, 2012

- 14:00 **Ensuring sustainable production – opportunities and limitations of certification systems**
A. Feige, Meo Carbon Solutions, Idstein/D

- 14:30 **Production and availability of agricultural commodities in Europe/Germany**
K. Schumacher, Nordzucker AG, Braunschweig/D

- 15:00 **Challenge renewable resources – the role of plant breeding**
G. Stiewe, Syngenta Seeds, Bad Salzflen/D

15:30 **Coffee Break**

Joint research biorefinery concepts – part I

Chair: R. Busch, Technologie- und Innovationsberatung, Baden-Baden

- 16:00 **BIOCORE: a multifeedstock-multiproduct concept for biorefining of lignocellulosic biomass**
M. O'Donohue, INSA, Toulouse/F

- 16:20 **Next generation biorefineries: the EuroBioRef concept**
F. Dumeignil, Lille University/F

- 16:40 **Suprabio: an overview**
A. Bhattacharya, Brunel University/GB

- 17:00 **AFORE – New separation and fractionation technologies of wood based chemicals and polymers from forest biorefineries**
A. Suurnäkki, VTT Technical Research Centre, Espoo/FIN

- 17:20 - 21:00 **Poster Party and Get Together**

Wednesday, February 15, 2012

Joint research biorefinery concepts – part II

Chair: R. Ulber, Technical University Kaiserslautern

08:30 **The civilisation biorefinery – efficient material and energy recovery from wastes and waste waters**
I. Körner, TU Hamburg-Harburg/D

08:50 **SynRg: plastics from renewable sources – systems biotechnology from plants to products**
J. Uhrig, Phytowelt Green Technologies GmbH, Köln/D

09:10 **BMELV joint research project: the german lignocellulose biorefinery pilot plant in Leuna**
J. Michels, DECHEMA e.V., Frankfurt/D

Treatment and conversion of biomass

Chair: M. Hempel, Deutsche Bundesstiftung Umwelt, Osnabrück/D

09:30 **Pretreatment options for the conversion of lignified biomass into materials and chemicals**
J. Puls, Johann Heinrich von Thünen-Institut, Hamburg/D

10:00 **Centrifugal processes for polishing and processing of oils**
S. Hruschka, GEA Westfalia Separator Deutschland GmbH, Oelde/D

10:30 **Coffee Break**

11:00 **Lignocellulosic biorefinery: status and further developments**
K. Neumann, Borregaard ind. Ltd, Sarpsborg/NO

11:30 **Exploitation of phyto-extracts by supercritical fluids**
V. Steinhagen, Uhde High Pressure Technologies GmbH, Hagen/D

Platform chemicals from renewable resources

Chair: M. Dröscher, GDCh, Frankfurt/D

12:00 **Production and use of organic acids**
J. Schulze, Uhde GmbH, Leipzig/D

12:30 **Value chain creation for the emerging bioeconomy**
A. Marx, Evonik Industries AG, Essen/D

13:00 **Lunch Break**

Wednesday, February 15, 2012

14:00 **Yeast-based production of bio-succinic acid: status and benefits**
Ir. Maarten van de Graaf, Roquette, Lestrem/F

14:30 **TANDEM-LECTURE**
Catalysts for the metathesis of oils and fats – access to novel bifunctional compounds based on renewable resources
K. Kowollik, Fraunhofer ICT, Pfingsttal/D
A. Rivas-Nass, Umicore AG & Co.KG, Hanau/D

Biobased products

Chair: J. Rothermel, VCI/D

15:00 **Bio-based & high performance lubricants: no natural conflict**
R. Luther, Fuchs Europe Schmierstoffe GmbH, Mannheim/D

15:30 **Platform chemicals from plant oils through integration of chemical and biotechnological processes**
S. Zibek, Fraunhofer IGB, Stuttgart/D

16:00 **Cycle Analysis, a key Rhodia competency for the sustainable development of products and processes. Case study: Rhodapex ESB 70 Nat as a bio-sourced replacement of conventional SLES**
S. Catarino, Rhodia, Aubervilliers/F

16:30 **Closing Remarks**
R. Ulber, Technical University Kaiserslautern/D

INVITATION

CONFERENCE VENUE

DECHEMA-House
Theodor-Heuss-Allee 25
60486 Frankfurt am Main
Germany
www.dechema.de

CONFERENCE OFFICE

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EXHIBITION

Parallel to the scientific sessions, companies are invited to present products, processes and services in the field of renewable resources. The exhibition area is close to the lecture and poster hall and allows an ideal integration of lectures, poster discussions as well as company and product presentations. The price per standard exhibition space (6 sqm) for the duration of the conference is 580 € plus VAT incl. one participation ticket.

For reservation or requests please contact the conference office, geiling@dechema.de.

SUBMISSION OF POSTER CONTRIBUTIONS

1-page abstracts have to be submitted via file upload at the website www.dechema.de/bioref2012 until **November 23, 2011**. A template for abstract preparation will be available on the website.

Authors will be informed about acceptance of their papers in December 2011. The accepted one page abstract will be printed in the book of abstracts of the conference.

Please note: Registration fee cannot be waived for authors.

REGISTRATION

REGISTRATION FEES^{*)}

Participants	Member ¹⁾	Non-Member
Accademia	220 €	235 €
Industry	370 €	385 €
Student ²⁾	80 €	90 €

*) No VAT requested according to § 4.22 UStG.

1) Personal DECHEMA-, VDI-GVC, GDCh-Members and EFC/EFCE passport holders

2) Proof of status necessary; price not valid for postgraduate students

The fee includes printed handouts (list of participants, book of abstracts) and catering during the coffee breaks and lunches.

REGISTRATION FOR PARTICIPATION

Subject to room capacity online registration will be possible until the conference. Please register under www.dechema.de/bioref2012.

An automatically generated confirmation of receipt will be sent to you by email directly after finishing your online registration. A separate invoice by post will be sent to you after your registration has been booked in.

Deadline to be included in the list of participants is **January 22, 2012**.

CANCELLATIONS AND REFUNDS

Only written cancellations will be accepted (letter, fax or email). 30 € administrative costs will be charged for any cancellation received before **January 22, 2012**. Thereafter 80 % of the registration fees will be invoiced. From the conference date on, no registration fee will be refunded and fees not yet paid still have to be paid. However, the book of abstracts will be sent.

If the event is cancelled by DECHEMA, the whole fees will be refunded. Further claims for compensation are excluded.

ACCOMMODATION

Hotel Tryp Frankfurt

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60486 Frankfurt am Main

Germany

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Fax: +49 69 70730-333

Email: reservierung@frankfurt@tryp-deutschland.de

Internet: www.solmelia.com

Accommodation has been reserved for the conference participants at a special discount until **January 17, 2012** at the latest. Please register at the hotel directly stating the codeword "Bioref2012".

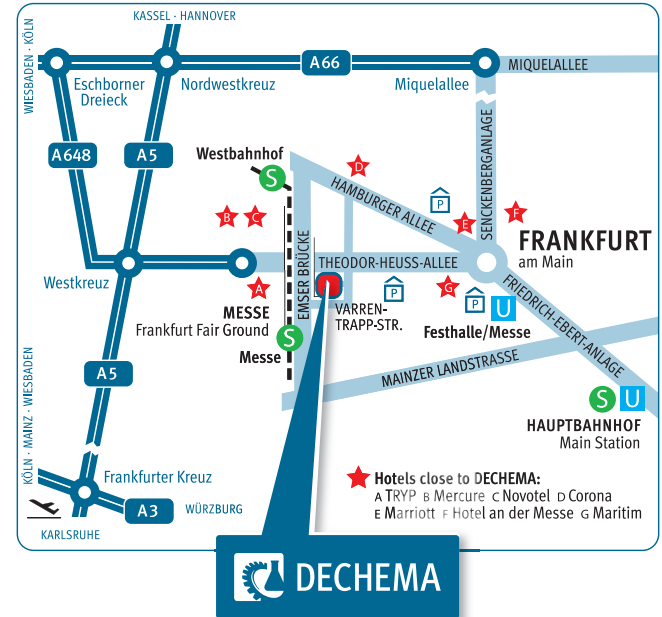
For detailed route description please check

www.dechema.de/location

Parking spaces on DECHEMA site are limited.

Please use the multi-storey car parks along Theodor-Heuss-Allee, e.g. Congress-Center- Messe (CMF) or Messeturm. Both are located in the direction of the city.

Please note: The area of DECHEMA is part of the low emission zone (www.umweltzone.frankfurt.de) in Frankfurt. Only vehicles displaying an appropriate badge on their windscreen will be allowed to enter the low emission zone.



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