



abiosus e.V.

Non-Profit Association for the Advancement of Research on Renewable Raw Materials

Fats and Oils as Renewable Feedstock for the Chemical Industry

Final Program

**2. - 3. September 2007
Emden, Germany**

in Cooperation with:

University of Applied Sciences OOW
German Society for Fat Science (DGF)
Agency of Renewable Resources (FNR)



DGF
Deutsche  Gesellschaft für Fettwissenschaft e.V.

sponsored by the German Federal Ministry of Nutrition, Agriculture and
Consumer Protection (BMELV) and the FNR

Invitation

The encouragement of the environmentally sound and sustainable use of natural resources is one aim of the Agenda 21. At present, fats and oils are the most widely applied renewable raw materials in the chemical industry, since they offer widespread possibilities for different applications. The workshop "Fats and Oils as Renewable Feedstock for the Chemical Industry" will discuss new developments as well as future perspectives of the chemical usage of fats and oils.

Workshop Program

Sunday, 2.09.2007

14.00 Registration

Chair: Jürgen O. Metzger

15.00 Welcome and opening remarks.

15.15 Joel Barrault, Laboratoire de catalyse en Chimie Organique, Poitiers, France, "**Glycerol: a renewable and valuable molecule for a sustainable chemistry**".

15.45 Klaus-Dieter Vorlop, FAL Braunschweig, Germany, "**Biotransformation of glycerol to 1,3-propanediol**".

16.15 Christian V. Stevens, Department of Organic Chemistry - Center of Renewable Resources, Faculty of Bioscience Engineering, Ghent University, Ghent, Belgium, "**Utilization of fatty acid derivatives in the development of bio-based chemicals**".

16.45 Ursula Biermann, University of Oldenburg, Oldenburg, Germany, "**Hydroalkylation of Unsaturated Fatty Compounds**".

17.05 – 18.00 **Poster session**

19.00 Dinner in Parkhotel Upstalsboom

Monday, 3.09.2007

Chair: Joel Barrault

9.00 Matthias Beller, Leibniz-Institut für Katalyse e.V. an der Universität Rostock, Rostock, Germany, "**Homogeneous catalysis: perspectives for the use of renewable feedstocks**".

9.30 U. Kragl^{a,b}, C. Vogl^a, E. Paetzold^a, ^{a)} Leibniz-Institute for Catalysis at the University of Rostock; ^{b)} Institute of Chemistry, University of Rostock, Rostock, Germany, "**Hydroformylation of oils in two phase systems**".

9.50 Andreas Martin, Angela Köckritz, Leibniz-Institut für Katalyse e. V., Berlin, Germany, "**Epoxidation of methyl oleate by molecular oxygen**".

10.10 Matteo Guidotti, Rinaldo Psaro, Maila Sgobba, Nicoletta Ravasio, CNR-Istituto di Scienze e Tecnologie Molecolari, and Dip. Chimica IMA and INSTM - UDR Milano, Milano, Italy, "**Heterogeneous catalytic processes for the selective epoxidation of unsaturated FAMES**".

10.30 Coffee break

Chair: Matthias Beller

11.10 Herbert Riepl, Institute of Resource- & Energy Technology, TU München, Germany, "**Olefin metathesis of fatty acids. On the way to the industrial realization**".

11.30 Michael Meier, University of Applied Sciences OOW, Emden, Germany, "**Novel Monomers and polymers from plant oils**".

11.50 Walter Kaminsky, Institute for Technical and Macromolecular Chemistry, University of Hamburg, Hamburg, Germany, "**New polymers by copolymerization of olefins with bio oil components**".

12.20 Lunch break

Chair: Michael Meier

13.40 George John, Department of Chemistry, The City College of the City University of New York, "**Soft NanoMaterials from Renewable Resources: A New Paradigm**"

14.10 Cor Koning, Eindhoven University of Technology, The Netherlands, "**Novel renewable polyesters for coating applications**"

14.40 Harald Häger, Degussa, Marl, Germany, "**Polyamides from renewable feedstocks: new materials versus established products**".

15.10 Paul Birnbrich, Cognis, Düsseldorf, Germany, "**Oxazolines, seen from an industrial perspective**".

15.30 Fabrizio Micciche, TU Delft, The Netherlands, "**Environmentally Friendly Alternatives for Co-based Dries for the Drying of Alkyd Paints: A Biomimetic Approach**".

15.50 Closing remarks

16.00 End

Poster Session

P1. I. Vanaga, T. Paeglis, R. Serzane, M. Strele, M. Jure, Riga Technical University, Faculty of Material Science and Applied Chemistry, "**Compositions of Biodegradable Chain Saw Oils Based on Rape, Hemp and Sea Buckthorn Oils**".

P2. Hanan Atia¹, Udo Armbruster², Andreas Martin^{2, 1)} Faculty of Women for Science, Arts and Education, Ain Shams University, Cairo, Egypt; ²⁾ Leibniz-Institut für Katalyse e.V. (Außenstelle Berlin), Berlin, Germany, "**Dehydration of glycerol to acrolein in gas phase using heteropolyacids as active compounds**".

P3. Yuni K. Krisnandi¹, Marek Checinski², Reinhard Eckelt², Andreas Martin², Manfred Richter²
¹ Dept. Chemistry, Faculty of Math.& Science, University of Indonesia, Depok 16424 Indonesia, ²Leibniz-Institut für Katalyse e.V. an der Univ. Rostock, Außenstelle Berlin,

Richard-Willstätter-Str. 12, D-12489 Berlin, “**In-depth study of glycerol etherification on Cs ion-exchanged zeolites**”.

- P4. Gökhan Çaylı, Selim Küsefoğlu, Boğaziçi University, Department of Chemistry, Istanbul, Turkey, “**Synthesis and Characterization of Biobased Allyl Acrylates**”.
- P5. Xin Jin, Roderick Bouvy, Stephen Picken, TU Delft and nabasco, Delft, The Netherlands, “**Polyester from natural sources**”.
- P6. Anastasiya Rybak, Michael A. R. Meier, University of Applied Sciences OOW, Emden, Germany, “**Cross-Metathesis of Unsaturated Fatty Acid Esters**”.
- P7. Patrice A. Fokou, Michael A. R. Meier, University of Applied Sciences OOW, Emden, Germany, “**Polymers from renewable resources: 2-Oxazolines from plant oils**”.
- P8. Tina Jacobs, Marco Schubert, Michael A. R. Meier, University of Applied Sciences OOW, Emden, Germany, “**Acrylate and Methacrylate Monomers from plant oil renewable resources**”.

The size of the poster should be up to A0 (841x1189 mm)

General Informations

Location

The workshop will take place at the University of Applied Sciences OOW, Emden, in the meeting room Coram (see map). Information about the University of Applied Sciences Oldenburg/Ostfriesland/Wilhelmshaven can be obtained from <http://www.fh-oow.de/english/locations.php> and about the city of Emden from http://www.emden-touristik.de/EMUT/engl_Frameset.html

Workshop Office

The Workshop Office, located in the meeting room Coram will be open on:

Sunday, September 2, 14:00 – 18:00

Monday, September 3, 8:30 – 16:00

Registration

Please register by sending the registration form by fax +49-441798193718 respectively by e-mail metzger@abiosus.org . After registration you will receive an invoice.

Lunch

There is a restaurant (Mensa) onsite offering lunch. A voucher for lunch is included in the conference fees.

Conference Dinner

The Conference dinner will take place on Sunday, September 2, in Upstalsboom Parkhotel, Emden, which is located 20 min on foot from the University. The additional costs are 50.00 €. Dead line for registration: August 20.

Dead Lines

Contribution of last minute posters incl. abstract: August 20, 2007.

Registration for workshop and dinner: August 20, 2007.

Hotel reservation: August 20, 2007.

How to get there:

- by plane: Surrounding international airports of Emden are: Bremen (<http://www.airport-bremen.de/>; ~130 km distance), Hamburg (www.ham.airport.de/; ~250 km distance) and Amsterdam (<http://www.schiphol.nl/>; ~ 300 km distance)
- by car: go on the A28 in direction of Emden , pass exits Emden-Ost, Emden-Wolthusen und Emden-Nord, stay on this road until you reach a large crossing with traffic lights (you will see the "Dollart-Center DOC"). Turn left (direction center). Turn left at the next traffic lights. Turn right after approximately 100m to the parking lot of the FH-OOW (*for your orientation you will see the wind power plant from far distances*)
- by train: the German railway schedule is available at: www.bahn.de
Travel time from Bremen main station is about 2 h, from Hamburg main station about 3 h, from Amsterdam Airport about 5 h.
Emden Main Station is ~10 minutes walking distance from the FH-OOW. Exit the station building, walk to your right towards the bridge. Walk up the stairs; turn right; walk over the bridge. Turn right at traffic lights and left into the next street (*there are OBI and Hummerich stores*). Follow this road for ~500m and you enter the FH-OOW campus(*for your orientation you will see the wind power plant from far distances.*) **TAXIS** are of course available at the main station, appr. 4€!

Accommodation:

Hotel reservations for conference attendees have been arranged at the following hotels. Please state that you attend the Workshop "Fats and Oils" at the "Fachhochschule" then the stated prices including breakfast are available for a limited number of rooms; these will be booked on the first come first serve basis without guarantee. Dead line: Monday, August 20.

Upstalsboom Parkhotel: 86 Euro/night. <http://www.upstalsboom.de/hotel/hotels.php?nr=16>,
Tel. +49 (0) 4921-828-0, Fax: +49 (0) 4921-828-599, parkhotel@upstalsboom.de

Hotel am Boltentor: 74 Euro/night. Tel.: +494921-97270; Fax +494921-972733;
E-mail: mail@hotel-am-boltentor.de .

Hotel Faldernport: 72 Euro/night. <http://www.faldernpoort.de/>; E-mail: info@faldernport.de ;
Tel. +494921-97520; Fax +494921-28761.

If you should have any questions, don't hesitate to bother the organizers.

Prof. Dr. Jürgen O. Metzger

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Dr. Michael A. R. Meier

michael.meier@fh-oow.de

<http://www.meier-michael.com>

Registration

I hereby register for the workshop "Fats and Oils as Renewable Feedstock for the Chemical Industry"

2. – 3. September 2007, Emden /Germany.

Please choose one:

Students: € 20 (student ID required)

Academia, Public Service: € 80

Industry: € 150

Diner: € 50

Company: _____

(Title)/Name: _____

Street: _____

City: _____

Country: _____

Tel.: _____

E-Mail: _____

(City)

(Date)

Signature (company seal if available)

Please transfer the total fees (free of bank commission) to:

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