#### Practical details

Date: September 18, 2013

**Time:** Registration and coffee and Poster session from 09.00 hours. Lectures in plenum between 10.00-16 30 hours

Place: Auditorium, KLP-building, Edvard Thomsens vej 14, Örestad, Denmark. (KLP-building is situated on a walking distance from Örestad train station. You reach the Örestad station with the Öresund train (Öresundstågen) from Copenhagen, Kastrup Airport, Malmoe and Lund. You may also reach Örestad station with the Copehagen Metro



**Registration:** through www.biorefinery-oresund.org or directly by following link: REGISTRATION (no later than 10th of September)

**Conference fee:** The conference is free of charge though available seats are limited and registration is cogent and mandatory,

**Posters:** We are open for registration of posters

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## **About Biorefinery Öresund**

Biorefinery Öresund is an Interregional research program between Swedish and Danish scientists dealing with biorefining. New biotechnical processes and biocatalysts for production and isolation of chemicals and materials from agriculture products are being developed and evaluated in economical and life cycle assessments. The program has an approach to the whole biorefining process - all the way from growing its own plants. Therefore the program involves various techniques such as metabolic engineering, process optimization, plant breeding, building and construction of pilotscale plant and mobile units, up-scaling, LCA and economic assessments, material development from proteins etc.

Biorefinery Oresund is financed by Interreg and EU. Involved scientists come from Lund University (dept. of Biotechnology and dept. of Environmental and Energy System Studies), Swedish University of Agricultural Sciences (Alnarp) and the Technical University of Denmark (dept. of Systems Biology, dept. of Chemical and Biochemical Engineering and dept. of Environmental Engineering). The advisory board includes representatives from Perstorp AB, Kalundborg Municipal, Nordic Sugar AB, the Federation of Swedish Farmers and Novozymes A/S.



# Welcome to Biorefinery Øresund conference

# Biorefining from raw material to high value products

September 18, 2013 Ørestad, Denmark













### About the conference

Technology development has given society, researchers and industry new possible routes to choose for future production of material, energy and chemicals. Today we have a very high dependence on fossil raw material for this production while fossil resources are getting harder, more expensive, and more non-environmental friendly to get hold of. New technology makes it more and more promising to use renewable material instead and we have a more realistic chance than ever to make a transition towards a bio-economy. However the investments for this transition are in many cases huge, and there is also a limit of how much renewable material the earth may produce per year in a sustainable way. The bio-economy has to be competitive with traditional production in every way. It also has to be put in the context of food production and production of energy. On the other hand the payoff might be enormous. The use of new technology brings the possibility of producing old products in a cheaper and more environmental friendly way. Totally new products may be produced to give complete new solutions to new and old problems and we may also solve the problem with non-biodegradable waste in the nature etc.

This conference will present to you the most interesting results from the 3 year long Biorefinery Öresund Project with scientists from Lund University, Technical University of Denmark and the Swedish Agriculture University that have been working together to develop the biorefinery concept from technical, economical and environmental perspective. We will listen to how the industry use bioprocesses commercially, how sustainable assessments are done on biorefinery systems and how the biorefinery may be the bridge between agriculture and chemistry. Another important topic that will be addressed is how policy making and global trends influence the production of renewable energy. Moreover, a real example will be presented on how the UK government and industry actively invest together to promote the development of a biobased economy in UK. From Bio Base Europe Pilot Plant we will hear about how Europe's first open innovation and education center for the biobased economy work with closing the gap in the innovation chain. The conference will end with a discussion in which the audience is invited to take an active part and then the whole session will be summed up with concluding remarks from Bo Mattiasson who initiated the building of Anneberg Biorefinery Pilot Plant that is being finalized within the frame of the Biorefinery Öresund Project.

### **Program:**

09.00-10.00 Poster session, coffee and registration

**10.00 Welcome Josefin Ahlqvist,** Project leader, Biorefinery Oresund

**10.15 Summary of the result of the Biorefinery Oresund Program** *Mahiri Workman,* Assoc Prof., DTU Systems Biology

10.45 Enzymatic biomass conversion optimization and sugar production for fuels and chemicals

Johan Böriesson. Senior Scientist. Novozymes A/S. Denmark

**11.15 Sustainability Assessment of Biorefinery Systems** *John A. Posada Duque*, Dr Copernicus Institute of Sustainable Development - Energy & Resources, Utrecht University

11.45 UK Driving Industrial Biotechnology uptake and the Bio economy – the UK strategy

**Rebecca Wood,** Technology Theme Manager – Industrial Biotechnology, Chemistry Innovation and The Industrial Biotechnology Leadership Forum (IBLF), UK

Lunch 12.15 – 13.15

**13.15 Biorefinery: the bridge between Agriculture and Chemistry** *Marieke Bruins,* Dr. Ir. ME Biobased Commodity Chemicals, Wageningen University

**13.45 Global trends and policies in renewable energy** *Leif Sonderberg Petersen,* Secretary General, World Energy Council

14.15 – 15.00 Poster session and coffee break

15.00 Jerusalem artichoke as raw material in the Biorefinery Concept *Ingólfur Bragi Gunnarsson*, DTU Environment

15.30 Bio Base Europe Pilot Plant- Closing the gap in the innovation chain

Hendrik Waegeman, Ph. D. Business Developer, Bio Base Europe Pilot Plant

**16.00 Discussion and concluding remarks**Chaired by **Bo Mattiasson**, Prof. Dept. of Biotechnology, Anneberg Biorefinery Plant

16.30 End of session