Friday, 18 March

Session 4: Hydrogenases and cell metabolism (Chair: Per Gardeström)

13.30-14.00 Michael Haumann
Department of Physics
Freie Universität Berlin, Germany
The active site of FeFe hydrogenase: structure, assembly, oxygen inactivation

14.00-14.30 Oliver Lenz
Department of Biology, Microbiology, Humboldt Universität, Berlin, Germany
Biological H_2 cycling in the presence of oxygen: fundamental principles and application

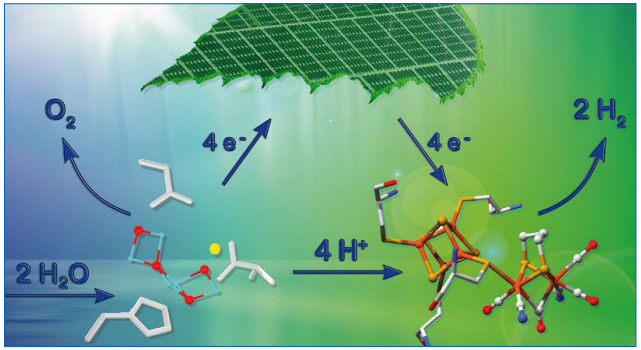
14.30-15.00 Poul-Eric Jensen
Department of Plant Biology and Biotechnology, University of Copenhagen, Denmark
Light driven suprametabolom

COFFEE

15.30-16.15 Selected talks from submitted poster abstracts

16.15-16.45 Presentations:
Stellan Marklund, Bio4Energy
Hannele Tuominen, Bioimprove
Umeå University, Sweden

16.45-17.00 Johannes Messinger
Department of Chemistry,
Umeå University, Sweden
Concluding remarks



The Chemical Biological Centre (KBC)

Founded in November 1999, the Chemical Biological Centre (in Swedish: Kemiskt Biologiskt Centrum, KBC) is one of the main research centres in life sciences at Umeå University. Six departments and 2 divisions from Umeå University (UmU) and the Swedish University of Agricultural Sciences (SLU) are forming one large multidisciplinary research centre. Around 700 people, from 39 different countries, are collaborating in a positive and creative environment in research and teaching. The KBC Research School is organizing a graduate program for around 250 PhD students and each department offers a large varity of courses for bachelor and master students.

How to find us

KBC is located in the south east of university campus. You reach the main entrance from “Linnaeus Väg”. The bus stop close-by is ”Växthuset”. Here, you find parking areas, too.

Contact/Organising Committee:

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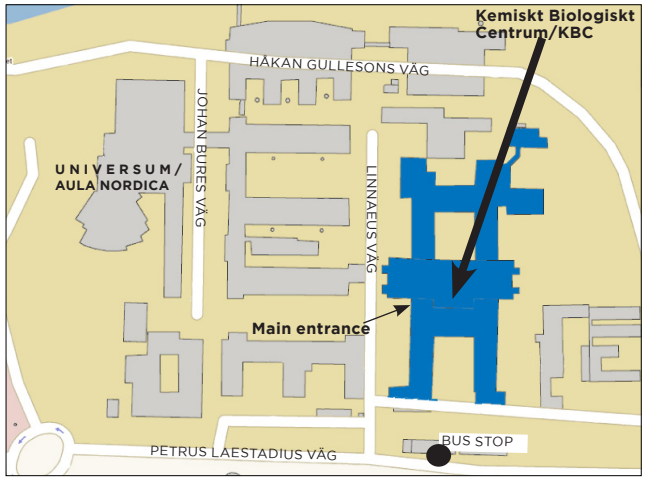

registration before:
4 March 2011
www.kbc.umu.se

Umeå Renewable Energy Meeting 17-18 March 2011

Kemiskt Biologiskt Centrum (KBC), Stora Hörsalen
Umeå University, Umeå, Sweden

www.kbc.umu.se

Thursday, 17 March

8.30-9.00 **Registration**

9.00-9.10 Per Gardeström
Umeå Plant Science Centre
Umeå University (UmU), Sweden
Opening

Session 1: Biomass (Chair: Hannele Tuominen)

9.15-10.00 **Taku Demura**
Graduate School of Biological Sciences, Nara Institute of Science and Technology (NAIST), Ikoma, Japan
Molecular mechanisms underlying production of cellulosic biomass/ secondary cell walls in model plants

10.00-10.45 **Jacqueline Grima-Pettenati**
Université Paul Sabatier,
Toulouse III / CNRS, France
Regulatory genes involved in secondary wall formation in Eucalyptus

COFFEE

11.10-11.45 **Edouard Pesquet**
Umeå Plant Science Centre,
Umeå University, Sweden
Mechanisms controlling the organization and patterning of secondary cell wall in woody cells

11.45-12.15 **Patrik R. Jones**
Department of Biochemistry and Food Chemistry, University ofTurku, Finland
Photobiological systems for renewable production of infrastructure-compatible hydrocarbon transport fuels

12.15-14.00 **LUNCH: POSTER VIEWING**

Thursday, 17 March

Session 2: Photosynthetic water splitting (Chair: Göran Samuelsson)

14.00-14.45 **Jian-Ren Shen**
Graduate School of Natural Science and Technology, Okayama University, Japan
Crystal structure of oxgen-evolving photosystem II at 1.9 Å resolution

14.45-15.15 **Per Siegbahn**
Department of Physics
Stockholm University, Sweden
Water exchange in the different S-states of water oxidation

15.15-15.45 **Holger Dau**
Department of Physics
Freie Universität Berlin, Germany
Water oxidation - from photosynthesis to amorphous metal oxides

COFFEE

16.15-16.45 **Johannes Messinger**
Department of Chemistry, KBC
Umeå University, Sweden
Biophysical studies of photosynthetic water-splitting

16.45-17.15 **Esa Tyystjärvi**
Molecular Plant Biology, Department of Biochemistry and Food Chemistry, University of Turku, Finland
Photoinhibition of photosystem II

17.15-17.45 **Fikret Mamedov**
Department of Photo Chemistry and Molecular Science,
Uppsala University, Sweden
Repair cycle and photoactivation of Photosystem II in cyanobacteria

18.00-19.00 POSTER VIEWING

DINNER

Friday, 18 March

Session 3: Artificial photosynthesis (Chair: Johannes Messinger)

9.00-9.45 **Kevin Sivula**
Laboratory of Photonics and Interfaces, Ecole Polytechnique Fédérale de Lausanne EPF, Switzerland
Photoelectrochemical water splitting using oxide electrodes

9.45-10.15 **Anders Thapper**
Department of Photo Chemistry & Molecular Science, Uppsala University, Sweden
Photochemical water oxidation using a cobalt based catalyst

COFFEE

10.45-11.30 **Vincent Artero**
Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA), Université Joseph Fourier (Grenoble) and Centre National de la Recherche Scientifique (CNRS), France
Hydrogen and Catalysis:
from micro-algae to nanomaterials

11.30-12:00 **Thomas Wågberg**
Department of Physics, Umeå University, Sweden
Pd catalyst supported on helical carbon fibers

12:00-12.30 **Ludvig Edman**
Department of Physics, Umeå University, Sweden
Towards stabile and efficient light emission from metal-free and flexible light-emitting electrochemical cells

LUNCH