California – Denmark Conference
"Rational Design of Catalytic Materials"

14-15 January 2008

Lawrence Berkeley National Laboratory

PRESS RELEASE
Fuel production from the sun
– The Helios Project meets Danish researchers

The California – Denmark Conference
"Rational Design of Catalytic Materials"

To successfully turn solar energy into transportation fuels requires crucial research into catalytic processes. Danish universities are world leaders in energy research with a unique expertise in catalysis. The Helios project at Lawrence Berkeley National Laboratory and UC Berkeley, with partners at other US institutions, was recently awarded a 500 million dollar grant from BP to find breakthrough ways of turning zero-carbon energy sources into mass scale transportation fuels.

On January 14-15, the two entities will join forces in exploring how catalysts can be designed for renewable energy use. Without a comprehensive plan and coordinated effort, solar is doomed to remain a small, niche technology inaccessible to the mainstream.

This innovative conference will feature leading catalysis experts from MIT, Caltech, UC Berkeley, Technical University of Denmark, The University of Aarhus and industry researchers from Atomistix and Haldor Topsoe.

To view the complete program, please visit the conference website:
http://www.lbl.gov/conferences/rdcm/index.html

Why Denmark and California?

Denmark and California have both been on the forefront of producing breakthrough research within the cleantech field.

Since 1980, the Danish economy has grown by 70 percent with no increase in energy consumption. This small country in Northern Europe generates a world record of 20 percent of its energy from renewable energy. Denmark has tripled its energy from biomass over the last 20 years and is completely energy

independent. The country will host the next U.N. Climate Summit in 2009 considered to be the most important since the Kyoto Protocol was entered in 1997.

In the US, California has led the efforts to place renewable energy and energy effiency at the top of the research agenda. In California, total electricity consumption has held constant since 1990 in spite of significant population growth and the emergence of technology centers such as Silicon Valley. This successful conservation effort is due in great part to the adoption of efficiencies pioneered at Lawrence Berkeley National Laboratory and the continuing policies of the California Public Utilities Commission. Both Denmark and California have responded to joint business, academia and community efforts to find zero-carbon energy sources.

The Helios project has several approaches to develop renewable fuels including the generation of biofuels from biomass or from the direct conversion of water and carbon dioxide to fuels by the use of solar energy.

On the nanoscale

In this research each atom matters, which is why the use of advanced nanomaterials has emerged as a crucial tool to achieve the fuels of the future. The conference will present the newest research on the use of nanostructures in the clean tech industry from both the public and private research domain. The only provider of commercially available software for nanoscale modeling is the Danish company Atomistix, which will demonstrate simulations of how to manipulate nanostructures in catalysis and photosynthesis.

Find out more

The Conference is a joint venture between Lawrence Berkeley National Laboratory and the Helios Project, the Danish company Atomistix, the Danish Agency for Science, Technology and Innovation (DASTI) and Innovation Center Denmark and will venue at The Lawrence Berkeley National Laboratory 14-15 January 2008.

For more information please visit the conference website:
http://www.lbl.gov/conferences/rdcm/index.html

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