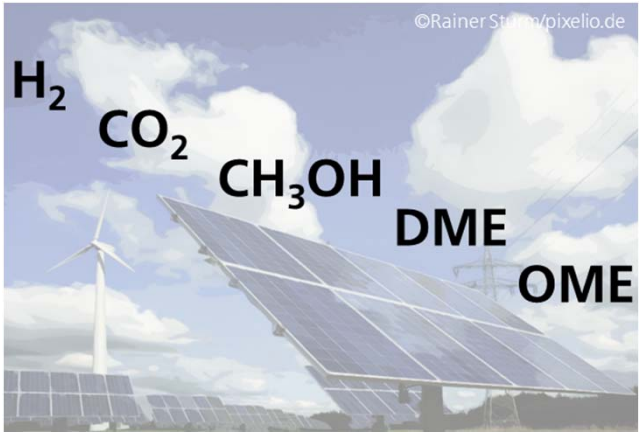
Perspectives on Power-to-Liquids & Power-to-Chemicals

Fraunhofer ISE

February 17th -18th 2016, Freiburg, Germany

Introduction

The *Perspectives on Power-to-Liquids and Power-to-Chemicals* workshop will bring together relevant stakeholders to discuss and advance synergies between renewable power generation, H_2 production and CO_2 utilisation in the context of the production of energy carriers, fuels and chemicals with industrial value (e.g. methanol, DME, OME, etc.). The aim of the workshop is to provide a platform for the latest insights on these increasingly interrelated topics with perspectives provided from academia, industry and politics. As part of the workshop, an evening event in Freiburg will provide an excellent networking opportunity for attendees. A tour of the state of the art facilities at the Fraunhofer ISE campus will complement the workshop and discussions. We look forward to welcoming you in Freiburg.



Venue

Solar Info Center, Emmy-Noether-Straße 2, 79110 Freiburg, Germany (located adjacent to Fraunhofer ISE)
www.solar-info-center.de

Registration

Registration is organised by PSE AG online until February 10th 2016 at http://ptl-workshop.pse.de. Number of participants is limited. Registration fee is € 240 (incl. VAT) for all participants, including the evening event on February 17th 2016. Payment has to be done in advance via credit card during online registration.

Accommodation

Limited contingent of rooms available at:

- Hotel "Stadt Freiburg" (€ 88 /night incl. breakfast)
  www.hotel-stadt-freiburg.de
  (until 01.02.16)

Booking code and more information at registration homepage. After this date, reservation with special rates possible at different hotels (see registration homepage). For travel and accommodation assistance, please contact Ms. Maria Frank (PSE AG; Maria.Frank@pse.de).

Scientific Organisation

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Program - Day 1 February 17th 2016

Registration	
13:30 - 14:30	Solar Info Center, Emmy-Noether-Straße 2, 79110 Freiburg, Germany
Overview	
14:30 - 15:00	*Role of Hydrogen and CO_2 in a Sustainable Energy, Fuels & Chemicals System* Dr. Christopher Hebling, Director, Hydrogen Technologies Division Fraunhofer Institute for Solar Energy Systems ISE, Germany
Global Picture & Policy - Session 1	
15:00 - 15:30	*From Waste to Raw Material - Can CO_2 Replace Petroleum in the Future?* Dr. Lothar Mennicken, Assistant Head, Resources and Sustainability Division, Federal Ministry for Education and Research (BMBF), Germany
15:30 - 16:00	*CO_2 Capture and Utilisation in the 2016 Work Programme* Mr. Wolfgang Schneider, DG Research and Innovation, G2 – Advanced Energy Production, European Commission, Belgium
16:00 - 16:20	*Coffee Break*
16:20 - 16:50	*Energy Challenges in the Synthetic Fuels Industry* Dr. Alex Vogel, Expert Process Development Engineer, Sasol Ltd., South Africa
16:50 - 17:20	*Carbon Capture and Conversion activities in British Columbia, Canada* Prof. Naoko Ellis, University of British Columbia & Director, Carbon Capture & Conversion Institute, Canada
17:30 - 19:15	Tour of Fraunhofer ISE Facilities
19:30 - 24:00	*Networking Event and Dinner, Peterhofkeller, Freiburg*

Methanol Miniplant at Fraunhofer ISE

Solar H_2 Filling Station at Fraunhofer ISE

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Program - Day 2 February 18th 2016

Energy Carriers, Fuels & Chemicals - Session 2 Morning	
09:00 - 09:30	*Power-to-Chemicals* Prof. Robert Schlögl, Director, Max Planck Institute for Chemical Energy Conversion, Germany
09:30 - 10:00	*Power-to-Chemistry®: Generation of Low-Carbon Impact Hydrogen using Industrial Electrochemical Processes* Dr. Georg Markowz, Senior Scientist, Process Technology & Engineering Innovation, Evonik Industries AG, Germany
10:00 - 10:30	*Overview of Hydrogen Carrier Projects in Japan* Mr. Jun-ichi Watanabe, Fukushima Renewable Research Institute AIST, Japan
10:30 - 11:00	*Coffee Break*
11:00 - 11:30	*Hydrogenation of CO_2 to Methanol & Derivatives - Performance of the Cu/ZnO/ZrO_2 Benchmark System and its Modification* Prof. Ingo Krossing, Chair of Molecular and Coordination Chemistry, University of Freiburg, Germany
11:30 - 12:00	*Confirmed* Dr. Günter Harp, Industry Advisor, Carbon Recycling International, Iceland
12:00 - 13:00	*Lunch*
Energy Carriers, Fuels & Chemicals - Session 2 Afternoon	
13:00 - 13:30	*Power-to-X using Reversible Solid Oxide Cell Technology* Mr. Christian von Olshausen, Chief Technology Officer, Sunfire GmbH, Germany
13:30 - 14:00	*Hydrogen to Chemicals* Dr. Steffen Schirrmeister, Chief Engineer Product Development, ThyssenKrupp Industrial Solutions AG, Germany
14:00 - 14:30	*Evolution or Revolution: The Role of Synthetic Fuels for Internal Combustion Engines* Dr. Werner Willems, Technical Expert, Powertrain Combustion Systems, Ford Werke GmbH, Germany
14:30 - 15:00	*Summary and Closing Remarks*