



Venue

Historisches Kaufhaus
Münsterplatz 24
79098 Freiburg | Germany



Copyright: FWTM

Scientific Organisation



Prof. Dr. Robert Schlögl

Director

Fritz Haber Institute of the Max Planck Society and
Max Planck Institute for Chemical Energy Conversion

robert.schloegl@cec.mpg.de | Phone: +49 208 306 3595



Dr. Christopher Hebling

Director Division, Hydrogen Technologies

Fraunhofer Institute for Solar Energy Systems ISE

christopher.hebling@ise.fraunhofer.de | Phone: +49 761 4588 5195

Registration and Workshop Fee

Registration is organised by PSE Conferences & Consulting GmbH online until May 25th, 2018 at <https://ptl-workshop2018.pse-co.de/>.

Number of participants is limited. Registration fee is € 240 for all participants. Dinner Fee is € 50.00 (incl. 19% VAT). Payment has to be done in advance via credit card during online registration.

Accommodation

Hotels with special rates for guests of Fraunhofer ISE (Keyword: "Fraunhofer ISE"):

- BEST WESTERN PREMIER Hotel Victoria (www.hotel-victoria.de)
- Inter City Hotel Freiburg (www.intercityhotel.com)
- Hotel Markgräfler Hof (www.markgraeflerhof-freiburg.de)
- Hotel Minerva (www.minerva-freiburg.de)

For registration assistance, please contact Ms. Maria Hemming (hemming@pse-co.de).

International Workshop Perspectives on Power-to-Liquids and Power-to-Chemicals 2018



June 4th-5th, 2018
Freiburg | Germany



Introduction

As a follow-up to the first *Perspectives on Power-to-Liquids and Power-to-Chemicals* workshop in 2016, this year's edition will bring together relevant stakeholders from academia, industry and politics to discuss, advance and highlight synergies between the growing renewable power generation, H₂ production and CO₂ utilisation targeting at the production of energy carriers, fuels and chemicals. A strong focus will be put on the development and application of technologies leading to products with different sectoral/industrial relevance (e.g. methanol, DME, OME, etc.). The workshop provides a platform for the latest insights on these closely intertwined topics with perspectives between scientific progress and successful market introduction. An evening event in Freiburg will provide an excellent networking opportunity, whilst 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.



Solar H₂ Filling Station at Fraunhofer ISE



Methanol Miniplant at Fraunhofer ISE

Programme: Day 1 | June 4th, 2018

Registration

12:30 **Historisches Kaufhaus**
Münsterplatz 24 | 79098 Freiburg | Germany

Welcome Address and Introduction | Dr. Christopher Hebling

13:30 **Pathways to an Integrated Energy System**
Prof. Hans-Martin Henning | Director, Fraunhofer ISE
Dr. Christopher Hebling | Director, Division Hydrogen Technologies

Session 1: Global Picture & Setting the Scene | Dr. Christopher Hebling

14:00 **Fostering Innovation for a Smart Energy Supply and the Sustainable Use of Resources**
Dr. Lukas Bo Voelkel | Regierungsrat Federal Ministry of Education and Research | Germany

14:30 **Synthetic Fuels as Critical Element in Renewable Energy Strategies**
Prof. Robert Schlögl | Director MPI-CEC & FHI-MPG | Germany

15:00 **Coffee break**

15:30 **Keynote Title TBD**
Bruce Niven | Chief Investment Officer Saudi Aramco Energy Ventures LLC | Saudi Arabia **TBC**

16:00 **Innovative Insurance Solutions – Bankability**
Stephan Leser | Senior Underwriter Munich Re | Germany

16:30 **Power-to-X in the Netherlands**
Dr. Earl Goetheer | TNO / Voltachem | Netherlands

17:45 **Tour of Fraunhofer ISE Facilities**
Bus transfer

19:30 **Networking Event and Dinner**
Peterhofkeller | Niemensstraße 10, 79098, Freiburg

Programme: Day 2 | June 5th, 2018

Session 2: Capture, Electrolysis and Production | Prof. Robert Schlögl

09:00 **Power-to-Fuels – Japanese Perspective**
Tatsusaburo Kimura | Sumitomo Cooperation Hydrogen Business Working Group Japan

09:30 **Technical Photosynthesis, Employing Single Step Direct Electrocatalytic Reduction of CO₂ Toward CO and Hydrocarbons**
Dr. Günter Schmid | Principal Key Expert at Siemens AG | Germany

09:55 **Methanol: The Standard Chemical, but Challenge for Petrochemical and Energy Application**
Wolfgang Seuser | MMSA Vice President EUROPE | Singapore

10:20 **Coffee break**

10:55 **Power-to-X – Delivering Sustainable Energy Carriers, Platform Molecules and Synthetic Oxygenates**
Dr. Robin White | Head of Group Sustainable Catalytic Materials Fraunhofer ISE | Germany

11:20 **Power-to-Fuel – Technology Looks for Business Case**
Dr. Arthur Heberle | Vice President
Mitsubishi Hitachi Power Systems Europe GmbH | Germany

11:45 **Lunch**

Session 3: Fuels & Combustion | Prof. Robert Schlögl

12:45 **OME as a Diesel Fuel: The Way to a Fuel Specification**
Dr. Thomas Wilharm | Director ASG Analytik | Germany

13:10 **Methanol Based PtL Fuels for Particulate Free Combustion in DI and SI Engines**
Dr.-Ing. Martin Härtl | Senior Engineer, Chair for Internal Combustion Engines | TU Munich | Germany

13:35 **Summary and Remarks** | Prof. Robert Schlögl

14:00 **Close**