WORKSHOP IN THE FRAME OF THE HORIZON 2020 PROJECT HEAT-TO-FUEL

HEAT-TO-FUEL INTERFACES TO ADVANCED POWER-TO-GAS AND POWER-TO-LIQUIDS TECHNOLOGIES (E-FUELS)

Power-to-Gas and Power-to-liquid (combined as Power-to-X) represent essential future technologies in terms of CO2 emission reduction by the utilization of CO2 from various sources (flue gases, biogases or atmosphere) for the production of advanced fuels.

SUMMARY:
Heat-to-Fuel is organizing this workshop which main goal is to give a technological overview on key steps in the Power-to-X process as well as to discuss market opportunities of provided e-fuels. The workshop includes market and technical oriented keynotes to introduce the participants to the subject. Furthermore, differences and similarities at the technical as well as at the political level between BtL and PtL are discussed comprehensively.

BEST Bioenergy and Sustainable Technologies

Heat to Fuel

R2M RESEARCH TO MARKET SOLUTION

AGENDA

PROGRAMME OF THE FIRST WORKSHOP DAY
MONDAY, THE 8TH OF MARCH 2021

09:00 KEYNOTES

Heat-to-Fuel: Beyond state-of-the-art fuel production with highly efficient PtL integration option.	DI Dr. Richard Zweiler, CEO, GET GmbH
E-fuels prospects – Where are we (heading to)?	Dipl.-Ing. Patrick Schmidt, Senior Consultant, LBST GmbH
BtL and PtL, differences and similarities at technical level	Prof. Dr. Reinhard Rauch, Professor, KIT
BtL and PtX into the framework of EU policies on biofuels	Prof. Dr. David Chiaramonti, President, RECORD
The Global Carbon Cap – A Legislation for Cost Efficient CO2 Reduction	Dr. Hermann Pengg, Managing Director, Audi e-gas Betreibergesellschaft m.b.H.

10:40 SESSION: HYDROGEN PRODUCTION

Large scale PEM-Electrolysis and Sector Coupling	Ilona Dickschas, Siemens Energy (New Energy Business)
Production of Renewable Hydrogen and Syngas via High-Temperature Electrolysis	Dr. Oliver Posdziech, Head of Large Systems Development, Sunfire GmbH
KEROGREEN, towards CO2 neutral chemicals and fuels	Prof. Dr. Richard van de Sanden, Group Leader PSFD, DIFFER
Aqueous phase reforming for the production of H2 from biorefinery waste waters: technological challenges and perspectives	Prof. Samir Bensaid, Professor, POLITO

12:00 CLOSING REMARKS

Wrap up and discussion of the first workshop day	Prof. Dr. Reinhard Rauch, Professor, KIT

12:20 END OF WORKSHOP DAY 1

PROGRAMME OF THE SECOND WORKSHOP DAY TUESDAY, THE 8TH OF MARCH 2021

09:00 SESSION: CARBON CAPTURE

Solid Sorbent Technology for post-combustion CO2 capture	Dr. Joana Tsou, Shell Global Solutions International B.V.
Direct Air Capture (DAC) – Closing the carbon cycle with E-Fuels from air	André Bechem, Senior Product Engineer, Climeworks

09:40 SESSION: FUEL PRODUCTION

Last flexible methanation in an advanced power-to-gas system	Dr. Alfred Friedacher, Director of R&D, Christof Industries Austria GmbH
CO2 gasification for the production of synthetic biofuels	Dr. Anna Mauerhofer, Post-doc, Dr. Stefan Müller, Senior Scientist, ICEBE, Vienna University of Technology
Milli-structured Heat Exchangers Reactors for Power to X applications	Geneviève Geffraye, Senior Scientist, CEA
Production of biofuel's precursors from HTL of industrial residues	Dr. Andrea Rizzo, Technical director, RECORD

11:00 SESSION: DEMONSTRATION PROJECTS

Results of the European PtG demonstration project STORE&GO	Dr. Frank Graf, Head of Division Gas Technology, DVGW Research Center at Engler-Bunte-Institut of KIT
Multimegawatt high-temperature electrolyser to generate green hydrogen for production of high-quality biofuels	Julie Mougin, Head of Hydrogen Technologies Laboratory, CEA
Linking of b-fuel and e-fuel production – Simmeringer Haide Research Hub	Dr. Teresa Schubert, Senior Specialist Research & Development, Wien Energie GmbH

12:00 CLOSING REMARKS

Wrap up and discussion of the second workshop day	Prof. Dr. Reinhard Rauch, Professor, KIT

12:20 END OF WORKSHOP

The attendance of the workshop is **free** of charge.

Registration:

DAY 1 & **DAY 2**

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