

EPFL Open Science Workshop on Solar Fuels Standards and Benchmarking

6-7th December, 2021

Program (In-person attendees)

All times listed are Central European Time (UTC+01:00)

Location: [SwissTech Convention Center](#), [Garden 4/STCC 0 7632](#)**Day 1 – 6th December 2021****Session 1: Overview of Solar Fuels Database**

10:00-10:15	Welcome <i>Prof. Sophia Haussener, EPFL</i>
10:15-11:00	Overview of Solar Fuels Database <i>Dr. Isaac Holmes-Gentle, EPFL</i>
11:00-11:30	Discussion

11:30-13:30 Lunch

Session 2: Benchmarking

13:30-14:00	Invited talk: “Benchmarking Artificial Leaves, Sheets & Panels for Solar Chemistry” <i>Prof. Erwin Reisner, Univ. of Cambridge</i>
14:00-14:30	Invited talk: “Measurement and reporting protocols for heterogeneous photocatalysis” <i>Prof. Kazuhiro Takanabe, The Univ. of Tokyo</i>
14:30-15:00	Invited talk: Importance of Community Engagement in Developing Benchmarks and Protocols <i>Dr. Kathy Ayers, NEL</i>
15:00-15:30	Invited talk: “Benchmarking Solar-to-Hydrogen Efficiency: Approaches for Improved Measurement Accuracy” <i>Dr. Todd Deutsch, NREL</i>
15:30-16:30	Moderated panel / discussions

16:30-17:00 Coffee break

17:00-18:00 Laboratory tours



Day 2 – 7th December 2021

Session 3: Degradation and Materials

09:30-10:00	Invited talk: “Chemical transformations of (photo)electrocatalytic materials” <i>Dr. Francesca Toma, Lawrence Berkeley National Laboratory</i>
10:00-10:30	Invited talk: “Identification of degradation pathways in photoelectrochemical systems” <i>Dr. Vincent Artero, Univ. Grenoble Alpes/CNRS/CEA Grenoble</i>
10:30-11:00	Invited talk: “Interrogating Earth-abundant metal oxide photoelectrodes with electrical and optical spectroscopies” <i>Prof. Sixto Gimenez, Universitat Jaume I</i>
11:00-11:30	Invited talk: “Dynamic photoelectrochemical responses as diagnostic tools for stability, charge transfer and recombination losses” <i>Prof. David Fermin, University of Bristol</i>
11:30-12:30	Moderated panel / discussions

12:30-14:30 Lunch

Session 4: Demonstrations and Characterization

14:30-15:00	Virtual lab visit <i>HZB/EPFL</i>
15:00-15:30	Invited talk: “Solar Hydrogen Production at Scale: Scale-up and Demonstration” <i>Prof. Jae Sung Lee, UNIST</i>
15:30-16:00	Invited talk: “Solar Fuel Devices: From Water Splitting to Water Dissociation” <i>Prof. Chengxiang Xiang, Caltech</i>
16:00-16:30	Moderated panel / discussions

16:30-17:00 Coffee break

17:00-18:00 Laboratory tours