

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

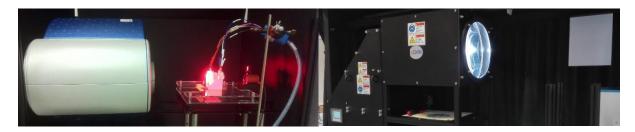
Session 1: Overview of Solar Fuels Database

| 10:00-10:15 | Welcome Prof. Sophia Haussener, EFPL |
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| 10:15-11:00 | Overview of Solar Fuels Database Dr. Isaac Holmes-Gentle, EPFL |
| 11:00-11:30 | Discussion |
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| 11:30-13:30 | Lunch |

Session 2: Benchmarking

| 13:30-14:00 | Invited talk: "Benchmarking Artificial Leaves, Sheets & Panels for Solar Chemistry" Prof. Erwin Reisner, Univ. of Cambridge |
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| 14:00-14:30 | Invited talk: "Measurement and reporting protocols for heterogeneous photocatalysis" Prof. Kazuhiro Takanabe, The Univ. of Tokyo |
| 14:30-15:00 | Invited talk: Importance of Community Engagement in Developing Benchmarks and Protocols Dr. Kathy Ayers, NEL |
| 15:00-15:30 | Invited talk: "Benchmarking Solar-to-Hydrogen Efficiency: Approaches for Improved Measurement Accuracy" Dr. Todd Deutsch, NREL |
| 15:30-16:30 | Moderated panel / discussions |
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| 16:30-17:00 | Coffee break |
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| 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" Dr. Francesca Toma, Lawrence Berkeley National Laboratory |
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| 10:00-10:30 | Invited talk: "Identification of degradation pathways in photoelectrochemical systems" Dr. Vincent Artero, Univ. Grenoble Alpes/CNRS/CEA Grenoble |
| 10:30-11:00 | Invited talk: "Interrogating Earth-abundant metal oxide photoelectrodes with electrical and optical spectroscopies" Prof. Sixto Gimenez, Universitat Jaume I |
| 11:00-11:30 | Invited talk: "Dynamic photoelectrochemical responses as diagnostic tools for stability, charge transfer and recombination losses" Prof. David Fermin, University of Bristol |
| 11:30-12:30 | Moderated panel / discussions |
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| 12:30-14:30 | Lunch |

Session 4: Demonstrations and Characterization

| 14:30-15:00 | Virtual lab visit HZB/EPFL |
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| 15:00-15:30 | Invited talk: "Solar Hydrogen Production at Scale: Scale-up and Demonstration" Prof. Jae Sung Lee, UNIST |
| 15:30-16:00 | Invited talk: "Solar Fuel Devices: From Water Splitting to Water Dissociation" Prof. Chengxiang Xiang, Caltech |
| 16:00-16:30 | Moderated panel / discussions |
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| 16:30-17:00 | Coffee break |
| | |
| 17:00-18:00 | Laboratory tours |