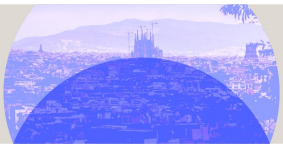


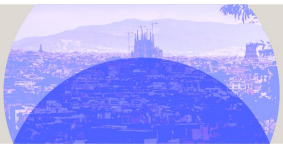
Materials for Sustainable Development Conference (MAT-SUS) (NFM22)

#OPCAT - Operando Characterization of Electrocatalytic Interfaces

Barcelona, Spain, 2022 October 26th - 27th
Conference Chairs: Reshma Rao, Marcel Risch and Kelsey Stoerzinger

Conference Program

October 26th - Day 3 (Wednesday)	
08:55 - 09:00	**Room S3+S4 - Chair Introduction**
	Session 1.1 Chair: Reshma Rao
09:00 - 09:15 1.1-T1	Sixto Giménez *(Institute of Advanced Materials INAM)*, Camilo Arturo Mesa, Ernest Pastor, Radeya Vasquez Romero, Eva Ng Leon, Francisco Fabregat Santiago, Elena Mas Marzá In situ investigation of metal oxide electrocatalysts by impedance spectroscopy
09:15 - 09:30 1.1-T2	CAIWU LIANG *(Department of Materials, Imperial College London)*, Reshma Rao, Joseph Hadden, Benjamin Moss, Soren Scott, Mary Ryan, Jason Riley, James Durrant, Ifan Stephens Unravelling the effects of active site densities and energetics on water oxidation activity of iridium oxides
09:30 - 09:45 1.1-T3	Wei Chen *(Department of Chemical Engineering and Chemistry, Eindhoven University of Technology,)*, Emiel Hensen, Marta Costa Figueiredo Quasi in situ XPS in electrocatalysis, benchmarks practice and application on oxygen evolution on Ru
09:45 - 10:00 1.1-T4	Ramón Arcas, Camilo A. Mesa *(Institute of Advanced Materials (INAM), Universitat Jaume I, 12006 Castelló, Spain)*, Miguel García-Tecedor, Maria C. Spadaro, Jordi Arbiol, Francisco Fabregat-Santiago, Sixto Giménez, Elena Mas-Marzá The effect of oxygen vacancies in the photoelectrochemical performance of metal oxide photoanodes
10:00 - 10:15 1.1-T5	Floriane Rollier *(Department of Chemical Engineering and Chemistry, Eindhoven University of Technology,)*, Marta Costa Figueiredo, Emiel Hensen The influence of copper particle size on the electrochemical reduction of CO to products with C-C bonds
10:15 - 10:30 1.1-T6	Hugo-Pieter Iglesias van Montfrot *(Department of Chemical Engineering, Delft University of Technology (TU Delft), The Netherlands)*, Thomas Burdyny Space-Resolved Mapping of Catalytic Activity in Electrolysers by Infrared Imaging
10:30 - 11:15	**Coffee Break**
	Session 1.2 Chair: Reshma Rao
11:15 - 11:45 1.2-I1	Ethan Crumlin *(Chemical Sciences Division, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, 94720 California, USA)* Direct Investigations of the Donnan Potential and Composite Water Electrolysis Electrode at the Solid/Liquid Interface Under In Situ and Operando Conditions
11:45 - 12:15 1.2-I2	Christoph Baeumer *(MESA+ Institute for Nanotechnology, University of Twente, Faculty of Science and Technology)* Shining Light on Interfacial Properties of Model Perovskite Oxide Electrocatalysts
12:15 - 12:45 1.2-I3	Gary Harlow *(Malmö University / MAX IV)* Modern synchrotron techniques for model electrode structure studies
19:30 - 22:00	**Social Dinner**



October 27th - Day 4 (Thursday)	
08:55 - 09:00	**Room S3+S4 - Chair Introduction**
	Session 2.1 Chair: Reshma Rao
09:00 - 09:30 2.1-I1	Olaf Magnussen *(Institute of Experimental and Applied Physics, Kiel University, 24118 Kiel, Germany)* Operando X-ray diffraction studies of Co oxide model catalysts for oxygen evolution
09:30 - 10:00 2.1-I2	Serhiy Cherevko *(Helmholtz-Institute Erlangen-Nuremberg for Renewable Energy (IEK-11), Forschungszentrum Jülich Cauerstr)*, Valentín Briega Martos Dissolution of Platinum Electrocatalytic Interfaces
10:00 - 10:30 2.1-I3	Yu Katayama *(SANKEN (The Institute of Scientific and Industrial Research), Osaka University)* Atomic Scale Understanding of the Electrochemical Interfaces : Operando Surface-Enhanced Infrared Absorption Spectroscopy (SEIRAS)
10:30 - 11:15	**Coffee Break**
	Session 2.2 Chair: Reshma Rao
11:15 - 11:45 2.2-I1	Magalí Lingenfelder *(Institute of Physics (IPHYS), EPFL Ecole Polytechnique Federale de Lausanne, Switzerland)* Hands up! Spins up! Magnetic fields and Chiral molecules in achiral electrocatalysis
11:45 - 12:15 2.2-I2	Vasiliki Tileli *(EPFL)* Insights into the Oxygen Evolution Reaction of Oxide Catalysts Probed with Liquid-Phase TEM
12:15 - 12:45 2.2-I3	Raj Pandya *(Cavendish Laboratory University of Cambridge)*, Alexis Grimaud Operando single-particle high-resolution Raman imaging of electrocatalysts and batteries
12:45 - 12:50	**Symposium Closing**
17:15 - 17:30	**General Closing**
17:30 - 20:00	**Poster Session**

Poster Contribution

326	Rosaria Verduci *(University of Messina)* Unravelling the Interaction of Water with Titanium Dioxide by FTIR Spectroscopy