



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

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**-MATERIALS FOR PHOTO & ELECTRIC ENERGY CONVERSION-**  
**I<sup>2</sup>CNER INTERNATIONAL WORKSHOP**  
**MOLECULAR PHOTOCONVERSION DEVICES DIVISION**  
**& ELECTROCHEMICAL ENERGY CONVERSION DIVISION**

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**DATE: FRIDAY, FEBRUARY 1, 2019**

**TIME: 9:30-17:30**

**VENUE: I<sup>2</sup>CNER HALL B**

Time	Speaker	Affiliation	Title
9:30-9:40	Prof. Hiroshige Matsumoto	I <sup>2</sup> CNER, Kyushu University	Opening Remarks
9:40-10:00	Prof. Toshinori Matsushima	I <sup>2</sup> CNER, Kyushu University	Efficient and stable metal halide perovskite solar cell
10:00-10:20	Prof. Motonori Watanabe	I <sup>2</sup> CNER, Kyushu University	Dye sensitized photocatalyst
10:20-10:40	Prof. Alexander Staykov	I <sup>2</sup> CNER, Kyushu University	Interaction of SrO-terminated SrTiO <sub>3</sub> surface with oxygen, carbon dioxide, and water
10:40-11:00	Prof. Minkyu Son	I <sup>2</sup> CNER, Kyushu University	Photoelectrochemical water splitting for hydrogen generation
11:00-11:40	Prof. Ryu Abe	Kyoto University	New mixed-anion semiconductors for photocatalytic water splitting under visible light
11:40-12:00	Dr. Nuttavut Kosem	I <sup>2</sup> CNER, Kyushu University	Photo bio catalyst for H <sub>2</sub> production
12:00-13:00	Lunch		
13:00-13:40	Prof. Lane Martin	U.C. Berkley	Leveraging Thin-Film Epitaxy to Design Optimal Perovskite Structures for High Ionic Conduction
13:40-14:20	Dr. Qiwen Lai	the University of New South Wales	Hydrogen storage with nanoscaled complex hydrides
14:20-15:00	Prof. Harry Tuller	Massachusetts Institute of Technology	Advances in the use of optical absorption spectroscopy in investigating defect equilibria and oxygen exchange kinetics in mixed ionic-electronic conducting SOFC cathodes

15:00-15:20	Coffee Break		
15:20-16:00	Dr. Daniele Pergolesi	Paul Scherrer Institute (PSI)	Oxynitride thin film model systems for solar water splitting
16:00-16:20	Prof. Kaveh Edalati	I <sup>2</sup> CNER, Kyushu University	High-pressure torsion treatment of photocatalysts
16:20-16:40	Dr. Kulbir Kaur	I <sup>2</sup> CNER, Kyushu University	Microstructural and Electronic Properties of the YSZ/CeO <sub>2</sub> interface
16:40-17:00	Dr. Vincent Thoreton	I <sup>2</sup> CNER, Kyushu University	Grain boundary diffusion in La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3+δ</sub>
17:00-17:20	Dr. Dino Klotz	I <sup>2</sup> CNER, Kyushu University	Negative capacitance or inductive loop; A general assessment of a common low frequency impedance feature
17:20-17:30	Prof. John A. Kilner	Imperial College London	Closing Remarks