

Symposium program

Tuesday, February 20, 2018

Time	Presenter	Title
9:30-9:40	Kiyotaka Asakura Director of ICAT	Welcome speech
<i>Chair: Kiyotaka Asakura (ICAT, Hokkaido University)</i>		
9:40-10:20	Michael R. Hoffmann California Institute of Technology, USA	Atomic layer deposition as a tool for tuning the reactivity of heterogeneous electrocatalysts for the chlorine and oxygen evolution reactions
10:20-10:50	Ryu Abe Kyoto University, Japan	Design of stable mixed-anion semiconductors for photocatalytic water splitting under visible light
10:50-11:10	Coffee break	
<i>Chair: Atsushi Fukuoka (ICAT, Hokkaido University)</i>		
11:10-11:30	Michael Wark University Oldenburg, Germany	Ferrites for photoelectrochemical water splitting and photocatalytic pollutant degradation
11:30-11:50	Emma Richards Cardiff University, UK	EPR investigations of earth abundant W-TiO ₂ and Mo-TiO ₂ nano-architectures for photoelectron storage and PEC water splitting
11:50-12:10	Adriana Zaleska-Medynska University of Gdansk, Poland	Recent development on application of TiO ₂ -based nanotubes in photocatalysis
12:10-14:00	Lunch break	
<i>Chair: Tamaki Nakano (ICAT, Hokkaido University)</i>		
14:00-14:40	Bunsho Ohtani Hokkaido University, Japan	Revisiting 1972-The year of kick off but anchoring for photocatalysis studies
14:40-15:00	Christophe Colbeau-Justin University of Paris-Saclay, France	Recent developments on studies of mobile charge-carriers in photocatalytic particles by Time Resolved Microwave Conductivity
15:00-15:20	Sankar Meenakshisundaram Cardiff University, UK	Supported monometallic and bimetallic nanoparticles for catalytic applications
15:20-15:45	Coffee break	
<i>Chair: Kenichi Shimizu (ICAT, Hokkaido University)</i>		
15:45-16:00	Justyna Łuczak Gdansk University of Technology, Poland	The ionic liquid-assisted solvothermal synthesis of TiO ₂ microspheres
16:00-16:15	Mohammad A. R. Jamil Hokkaido University, Japan	Methylation of amines with methanol using Pt/C catalyst and base
16:15-16:30	Joanna Nadolna University of Gdansk, Poland	Nd-modified TiO ₂ nanoparticles: characterization and photoactivity
16:30-17:00	Teruhisa Ohno Kyushu Institute of Technology, Japan	Development of p-type semiconductor electrodes for photoelectrochemical CO ₂ reduction under visible light
17:00	Group photo	
17:10-18:10	Poster presentations (selection of best posters by invited presenters)	
18:20-20:20	Banquet	

■ **Plenary lecture (40 min)**

■ **Invited lecture (20 min)**

■ **Key-note lecture (30 min)**

■ **Short talk (15 min)**

Symposium program

Wednesday, February 21, 2018

Time	Presenter	Title	Page
<i>Chair: Bunsho Ohtani (ICAT, Hokkaido University)</i>			
9:30-10:10	Detlef Bahnemann Leibniz University of Hannover, Germany	Catalytic vs. photocatalytic processes on TiO ₂ surfaces: an isotopic and FTIR study	
10:10-10:40	Kazuhiko Maeda Tokyo Institute of Technology, Japan	Photocatalytic CO ₂ reduction and water oxidation using surface-modified semiconductors	
10:40-11:00	<i>Coffee break</i>		
<i>Chair: Ryu Abe (Kyoto University)</i>			
11:00-11:30	Wojciech Macyk Jagiellonian University, Poland	How to determine band gap energy and redox properties of photocatalysts?	
11:30-11:50	Jeremy J. Pietron US Naval Research Laboratory, USA	Plasmonic photocatalysis and small molecule oxidation catalysis at oxidation-stable Cu-TiO ₂ aerogels	
11:50-12:10	Elena Selli University of Milan, Italy	Charge carriers photogenerated in photocatalytic materials: transient absorption and time-resolved photoluminescence investigations	
12:10-14:00	<i>Lunch break</i>		
<i>Chair: Jun-ya HASEGAWA (ICAT, Hokkaido University)</i>			
14:00-14:40	David Ollis North Carolina State University, USA	Kinetics of photocatalyzed reactions: five lessons learned	
14:40-15:00	Izabela Rzeznicka Shibaura Institute of Technology, Japan	Hybrid surface materials of inorganic-organic layered structures as cathode materials for Li-airrechargeable batteries	
15:00-15:20	Agata Markowska-Szczupak West Pomeranian University of Technology, Poland	Antimicrobial activity of modified titanium dioxide for detoxification and disinfection of water	
15:20-15:35	Osamu Tomita Kyoto University, Japan	Polyoxometalate as a stable shuttle redox mediator in Z-scheme water splitting	
15:35-15:50	Anna Malankowska University of Gdansk, Poland	Trimetallic Au@Pd@Pt core-shell nanoparticles modified TiO ₂ and NaTaO ₃ with enhanced visible light activity	
15:50-16:10	<i>Coffee break</i>		
<i>Chair: Mai Takashima (ICAT, Hokkaido University)</i>			
16:10-16:40	Hynd Remita CNRS and University of Paris- Saclay, Orsay, France	Conjugated polymer nanostructures for photocatalysis under visible light	
16:40-17:00	Satoru Takakusagi Hokkaido University, Japan	Structure and reactivity on well-defined model catalyst surfaces studied by STM and XAFS	
17:00-17:20	Anna Zielińska-Jurek Gdansk University of Technology, Poland	Magnetic photocatalysts for water treatment	
17:20-17:40	Yuichi Kamiya Hokkaido University, Japan	Catalytic reduction of nitrate toward purification of actually polluted groundwater	
17:40-17:55	Cody Finke California Institute of Technology, USA	Atomic layer deposition as a tool for tuning the reactivity of heterogeneous electrocatalysts for the chlorine and oxygen evolution reactions	
17:55-18:10	Anna Gołębiewska University of Gdansk, Poland	The effect of gold shape and size on the visible light induced photoactivity of Au-TiO ₂	
18:10-18:20	<i>Ceremony of poster awards</i>		
18:20-18:30	Ewa Kowalska Hokkaido University, Japan	Closing remarks	

Symposium program

Thursday, February 22, 2018

Post-conference trip (8:00-20:00)



8:00 Departure (Mystays Sapporo hotel)
10:15 Toya Lake and Toyako Volcano Science Museum (<http://www.toyako-vc.jp/en/volcano/>)

10:30 Movie show

11:00 Departure to Shiraoi (lunch during the trip)

12:00 Shiraoi, Poroto Kotan with Ainu Museum

(<http://www.ainumuseum.or.jp/en/study/eng01.html>)

12:15-12:40 performance (or 13:15-13:40)*

13:30 Departure to Noboribetsu (or 13:50)*

14:00 Noboribetsu (or 14:20)*

14:00-14:30 Oyunuma observatory
(or 14:20-14:50)*

14:30-15:10 Hell Valley
(or 14:50-15:40)*

15:20-17:30 Onsen (hot spring bath)
(or 15:50-17:30)*

17:30-18:30 Dinner

18:30 Departure to New Chitose Airport and Sapporo

20:00 Arrival at Mystays Sapporo hotel



*depending on traffic conditions