

The 1st International Workshop on Carbon Value Science & Technology

日時: October 26th, 2022

場所: オンライン (Zoom)

主催: 東京理科大学研究推進機構総合研究院カーボンバリュー研究拠点

<https://www.rs.tus.ac.jp/carbonvalue/index.html>

協賛: カーボン・エネルギーコントロール社会協議会 (Consortium of All Nippon Artificial Photosynthesis Project for Living Earth: CanApple)

言語: 英語

参加登録締め切り: 2022 年 10 月 19 日

参加料: 無料

本ワークショップの趣意

カーボンニュートラルを目指すための科学技術に焦点を当てます。二酸化炭素を炭素源として有効利用するための人工光合成, 光触媒, 電極触媒, 二酸化炭素排出を抑制するための二次イオン電池, 燃料電池などがトピックスです。

参加希望の方は下記の web サイトから事前登録をお済ませください。

[登録フォーム](#)

招待講演者

<Artificial photosynthesis>

Shane Ardo (University of California Irvine, USA)

Takeshi Morikawa (Toyota Central R&D Labs., Inc.)

<Energy Materials>

Seong-Ju Hwang (Yonsei University, Korea)

Lianzhou Wang (University of Queensland, Australia)

<Electrocatalysis>

Antoni W. Morawski (West Pomeranian University of Technology in Szczecin, Poland)

<Fuel cell & Hydrogen, Secondary ion-battery>

Eiji Ohira (New Energy and Industrial Technology Development Organization (NEDO), Japan)

Stefano Passerini (Helmholtz Institute Ulm & Karlsruhe Institute of Technology, Germany)

東京理科大学からの講演者

<Artificial photosynthesis>

Akihiko Kudo

<Energy Materials>

Yuichi Negishi

<Electrocatalysis>

Chiaki Terashima and Norihiro Suzuki

<Secondary ion-battery>

Shinichi Komaba

Conference Chair:

Prof. Akihiko Kudo (A Leader of Carbon Value Research Center)

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The 1st International Workshop on Carbon Value Science & Technology

(https://www.rs.tus.ac.jp/carbonvalue/en/news_1st_International_Workshop.html)

- ✚ Date: Wednesday, October 26th, 2022
- ✚ Venue: Zoom on-line at Tokyo University of Science (TUS)
- ✚ Organized by Carbon Value Research Center (CVRC), Research Institute for Science and Technology (RIST), TUS
- ✚ Cooperation: Consortium of All Nippon Artificial Photosynthesis Project for Living Earth (CanApple)

Time				Speaker	Title
Japan time	PST	AEST	CET		
Session 1: Artificial Photosynthesis (Chair: Yumi Tanaka)					
9:00 -9:05	10/25 17:00 -17:05	11:00 -11:05	2:00 -2:05	Yasuo Kogo Vice president, TUS	Opening remarks
9:05 -9:35	10/25 17:05 -17:35	11:05 -11:35	2:05 -2:35	Akihiko Kudo CVRS, TUS	Introduction of CVRC Artificial photosynthesis for Carbon Value
9:35 -10:15	10/25 17:35 -18:15	11:35 -12:15	2:35 -3:15	(Invited) Shane Ardo (University of California Irvine, USA)	Technoeconomically Viable Ensembles of Artificial Photosynthetic Nanoreactors for Z- Scheme Solar Water Splitting
10:15 -10:55	10/25 18:15 -18:55	12:15 -12:55	3:15 -3:55	(Invited) Takeshi Morikawa (Toyota Central R&D Labs., Inc.)	Solar-driven CO ₂ reduction by semiconductor/metal-complex hybrid photosystems
Group photo shoot					
Break time					
Session 2: Photo/Electrocatalyst (Chair: Akihiko Kudo)					
11:10 -11:30	10/25 19:10 -19:30	13:10 -13:30	4:10 -4:30	Yuichi Negishi CVRC, TUS	Activation of Photo/Electrocatalysts using Controlled Metal Clusters
11:30 -12:10	10/25 19:30 -20:10	13:30 -14:10	4:30 -5:10	(Invited) Lianzhou Wang (University of Queensland, Australia)	Semiconductor Nanomaterials for Photoelectrochemical Energy Conversion
12:10-13:40 Lunch time					
Session 3: Energy material & CO ₂ reduction (Chair: Kiyoshi Dowaki)					
13:40 -14:20	10/25 21:40 -22:20	15:40 -16:20	6:40 -7:20	(Invited) Seong-Ju Hwang (Yonsei University, Korea)	Fine-control of the interface and defect structures of 2D nanostructured hybrids applicable for renewable energy technology
14:20 -14:40	10/25 22:20 -22:40	16:20 -16:40	7:20 -7:40	Chiaki Terashima Norihiro Suzuki CVRS, TUS	Purification and Condensation of Formic Acid Produced by Electrochemical CO ₂ Reduction
14:40 -15:20	10/25 22:40 -23:20	16:40 -17:20	7:40 -8:20	(Invited) Antoni W. Morawski (West Pomeranian University of Technology in Szczecin. Poland)	New photocatalytic processes for the reduction of CO ₂ into valuable chemicals
Break time					
Session 4: Fuel Cell and Rechargeable Ion Battery (Chair: Yuichi Negishi)					
15:35 -16:15	10/25 23:35 -0:15	17:35 -18:15	8:35 -9:15	(Invited) Eiji Ohira (NEDO, Japan)	TBD
16:15 -16:55	10/25 0:15 10/26 0:55	18:15 -18:55	9:15 -9:55	(Invited) Stefano Passerini (Helmholtz Institute Ulm & Karlsruhe Institute of Technology, Germany)	Bio-waste derived hard carbons for Sodium-ion battery anodes
16:55 -17:15	10/26 0:55 -1:15	18:55- 19:15	9:55- 10:15	Shinichi Komaba CVRS, TUS	Na-ion and K-ion chemistry for next generation battery

17:15 -17:20	10/26 1:15 1:20	19:15- 19:20	10:15- 10:20	Hiroshi Nishihara Director RIST, TUS	Closing remarks
Group photo shoot					

PST: Pacific Standard Time AEST: Australian Eastern Standard Time CET: Central European Time
Presentation time including 5-10 min for discussion

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