

Hope for the Future
— RIKEN Symposium on Sustainable Resource Science —

環境資源科学研究センター(RIKEN Center for Sustainable Resource Science (CSRS))は2013年の設立以来、植物科学、ケミカルバイオロジー、触媒化学の異分野融合によって持続的な社会の実現に向け、環境負荷の少ない「モノづくり」を理念に「課題解決型」研究を推進している。

本シンポジウムは、「環境資源科学」という新しい分野を確立し、広く社会に発信することを目的とし、社会が求める「環境資源科学」とは何か、そして我々のセンターや研究者に何ができる/すべきかについて議論する。

日時:2021年5月28日(金) 9:00~17:50

形式:Zoom ウェビナー(同時通訳あり、要事前登録)

YouTube ライブ配信(英語のみ、登録不要)

言語:英語

主催:理化学研究所 環境資源科学研究センター

詳細 URL:<http://www.csr.s.riken.jp/en/symposium/index.html>

参加登録:<https://krs1.riken.jp/m/symposium>

プログラム:

9:00-9:05	Welcome address(Dr. Kazuki Saito, Director, RIKEN CSRS)
9:05-9:10	Opening remarks (Dr. Hiroshi Matsumoto, President, RIKEN)
9:10-9:15	Greetings (Mr. Mitsuhiro Doishita, Director, Environment and Energy Division, MEXT)
Keynote Lecture 1	
9:15-10:00	Dr. Akira Yoshino (Recipient of the Nobel Prize in Chemistry 2019 / Honorary Fellow, Asahi Kasei Corporation) <i>"The Future Society Engendered by Lithium-ion Batteries"</i>
10:00-10:10	<i>Break</i>
Session 1: Innovative Catalysts	
10:10-10:30	Dr. Zhaomin Hou (Project Leader, RIKEN CSRS) <i>"Innovative Catalysts for Efficient Use of Natural Resources"</i>
10:30-10:50	Prof. Cathleen M. Crudden (Professor, Queen's University, Canada) <i>"Organometallic catalysis: molecules and clusters in catalysis"</i>
10:50-11:10	Prof. Masakazu Sugiyama (Professor, The University of Tokyo) <i>"Integrated Electrochemical Systems for Scalable CO₂ Conversion to Chemical Feedstocks"</i>
11:10-11:20	<i>Break</i>
Session2: Leading-edge Polymers	
11:20-11:40	Dr. Hideki Abe (Project Leader, RIKEN CSRS) <i>"Contribution of new functional polymers to realization of a sustainable society"</i>
11:40-12:00	Prof. Kyoko Nozaki (Professor, The University of Tokyo)

	<i>"Heterolytic Cleavage of H₂ for Hydrogenolysis of Polar Bonds"</i>
12:00-12:20	Prof. Sudesh Kumar (Professor, Universiti Sains Malaysia) <i>"Development of a sustainable and low cost process for the production of biodegradable plastics (polyhydroxyalkanoates) from oil palm biomass"</i>
12:20-13:20	<i>Lunch</i>
Session 3: Innovative Plant Biotechnology	
13:20-13:40	Dr. Minami Matsui (Project Leader, RIKEN CSRS) <i>"To the goal of Innovative plant biotechnology -Contributing to sustainable food and biomass production through development of plant trait improvement techniques-"</i>
13:40-14:00	Prof. Wilhelm Gruissem (Professor, ETH Zürich) <i>"Genetic engineering and CRISPR-Cas9 strategies for sustainable micronutrient and yield increases in rice and cassava"</i>
14:00-14:20	Dr. Ken Shirasu (Vice Project Leader, RIKEN CSRS) <i>"Plant Symbiosis Research for Agricultural and Environmental Sustainability"</i>
14:20-14:30	<i>Break</i>
Session 4: Metabolic Genome Engineering	
14:30-14:50	Dr. Akihiko Kondo (Project Leader, RIKEN CSRS) <i>"Metabolic genome engineering project: Overview and examples in microorganisms"</i>
14:50-15:10	Prof. Anne Osbourn (Professor, John Innes Centre, UK) <i>"Finding drugs in the garden: Harnessing plant metabolic diversity"</i>
15:10-15:30	Dr. Masami Hirai (Vice Project Leader, RIKEN CSRS) <i>"Approaches to metabolic genome engineering of plant"</i>
15:30-15:40	<i>Break</i>
Session 5: Early career scientists	
15:40-15:50	Dr. Sobi Asako (Senior Scientist, RIKEN CSRS) <i>"Towards Sustainable Organic Synthesis Using Sodium"</i>
15:50-16:00	Dr. Miki Fujita (Senior Scientist, RIKEN CSRS) <i>"Plant Phenomics Links Between Plant Science and the Future of Agriculture"</i>
16:00-16:10	Dr. Masanori Izumi (Senior Scientist, RIKEN CSRS) <i>"Dissecting a recycling system in plants- towards the development of sustainable agricultural production"</i>
Keynote Lecture 2	
16:10-16:55	Prof. Johan Rockström (Director, Potsdam Institute for Climate Impact Research / Professor, Earth System Science, University of Potsdam) <i>"Sustainable Resource Science in the Anthropocene: Governing the Global Commons within Planetary Boundaries"</i>
16:55-17:05	<i>Break</i>
17:05-17:45	Panel discussion
17:45-17:50	Closing remarks (Dr. Yuko Harayama, Executive Director, RIKEN)

<問い合わせ>

国立研究開発法人理化学研究所 環境資源科学研究センター

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<個人情報に関する取扱いについて>

提供いただいた個人情報は、集計および主催者からの連絡に利用させていただきます。

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Since its establishment in 2013, CSRS has been promoting "problem-solving" research based on the principle of "manufacturing" with a low environmental impact, with the aim of realizing a sustainable society through the integration of different fields of plant science, chemical biology, and catalytic chemistry. The purpose of this symposium is to establish a new field of "sustainable resource science" for the realization of the Sustainable Development Goals (SDGs) and to widely disseminate this field to society, and to allow us to discuss society's expectation of "sustainable resource science" and what our centers and researchers can and should do to make this all possible. Dr. Akira Yoshino (recipient of the Nobel Prize in Chemistry 2019) and Professor Johan Rockström (Director of the Potsdam Institute for Climate Impact Research) will give talks as keynote speakers.

Friday, May 28, 2021 9:00 am to 5:50 pm JST

Zoom Webinar

* Simultaneous interpretation will be provided.

* Pre-registration is required.

Live-stream on YouTube (<https://youtu.be/5Gz8GOyqVVQ>)

* English only

* Free to access

Language: English

Organizer: RIKEN Center for Sustainable Resource Science (CSRS)

Detail: <http://www.csrs.riken.jp/en/symposium/index.html>

Registration: <https://krs1.riken.jp/m/symposium>

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Contact:

Secretariat of "Hope for the Future" Symposium

RIKEN Center for Sustainable Resource Science (CSRS)

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