

Hope for the Future

– RIKEN Symposium on Sustainable Resource Science –

May 28th, 2021

Zoom Webinar

Simultaneous interpretation
(from English to Japanese)
will be provided



Pre-registration required

YouTube

English only



 <https://youtu.be/5Gz8G0yqVVQ>

- 9:00 **Welcome address** Dr. Kazuki Saito (Director, RIKEN CSRS)
9:05 **Opening remarks** Dr. Hiroshi Matsumoto (President, RIKEN)
9:10 **Greetings** Mr. Mitsuhiro Doishita (Director, Environment and Energy Division, MEXT)
9:15 **Keynote Lecture**
Dr. Akira Yoshino (Recipient of the Nobel Prize in Chemistry 2019 / Honorary Fellow, Asahi Kasei Corporation)

Break

- 10:10 **Session1: Innovative Catalysts**
Dr. Zhaomin Hou (Project Leader, RIKEN CSRS)
Prof. Cathleen M. Crudden (Professor, Queen's University, Canada)
Prof. Masakazu Sugiyama (Professor, The University of Tokyo)

Break

- 11:20 **Session2: Leading-edge Polymers**
Dr. Hideki Abe (Project Leader, RIKEN CSRS)
Prof. Kyoko Nozaki (Professor, The University of Tokyo)
Prof. Sudesh Kumar (Professor, Universiti Sains Malaysia)

Lunch

- 13:20 **Session3: Innovative Plant Biotechnology**
Dr. Minami Matsui (Project Leader, RIKEN CSRS)
Prof. Wilhelm Gruissem (Professor, ETH Zürich)
Dr. Ken Shirasu (Vice Project Leader, RIKEN CSRS)

Break

- 14:30 **Session4: Metabolic Genome Engineering**
Dr. Akihiko Kondo (Project Leader, RIKEN CSRS)
Prof. Anne Osbourn (Professor, John Innes Centre)
Dr. Masami Hirai (Vice Project Leader, RIKEN CSRS)

Break

- 15:40 **Session5: Early career scientists**
Dr. Sobi Asako (Senior Scientist, RIKEN CSRS)
Dr. Miki Fujita (Senior Scientist, RIKEN CSRS)
Dr. Masanori Izumi (Senior Scientist, RIKEN CSRS)

- 16:10 **Keynote Lecture**
Prof. Johan Rockström (Director, Potsdam Institute for Climate Impact Research /
Professor, Earth System Science, University of Potsdam)

Break

- 17:05 **Panel discussion**

- 17:45 **Closing remarks** Dr. Yuko Harayama (Executive Director, RIKEN)

Keynote Lecturers

Dr. Akira Yoshino

(Recipient of the Nobel Prize in Chemistry 2019 /
Honorary Fellow, Asahi Kasei Corporation)

*The Future Society Engendered
by Lithium-ion Batteries*



Prof. Johan Rockström

(Director, Potsdam Institute for Climate Impact Research /
Professor, Earth System Science, University of Potsdam)

TBD



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Session1: Innovative Catalysts

Dr. Zhaomin Hou (Project Leader, RIKEN CSRS)

Innovative Catalysts for Efficient Use of Natural Resources

Prof. Cathleen M. Crudden (Professor, Queen' s University, Canada)

Organometallic catalysis: molecules and clusters in catalysis

Prof. Masakazu Sugiyama (Professor, The University of Tokyo)

Integrated Electrochemical Systems for Scalable CO₂ Conversion to Chemical Feedstocks

Session2: Leading-edge Polymers

Dr. Hideki Abe (Project Leader, RIKEN CSRS)

Contribution of new functional polymers to realization of a sustainable society

Prof. Kyoko Nozaki (Professor, The University of Tokyo)

Heterolytic Cleavage of H₂ for Hydrogenolysis of Polar Bonds

Prof. Sudesh Kumar (Professor, Universiti Sains Malaysia)

Development of a sustainable and low cost process for the production of biodegradable plastics (polyhydroxyalkanoates) from oil palm biomass

Session3: Innovative Plant Biotechnology

Dr. Minami Matsui (Project Leader, RIKEN CSRS)

To the goal of Innovative plant biotechnology -Contributing to sustainable food and biomass production through development of plant trait improvement techniques-

Prof. Wilhelm Gruissem (Professor, ETH Zürich)

Genetic engineering and CRISPR-Cas9 strategies for sustainable micronutrient and yield increases in rice and cassava

Dr. Ken Shirasu (Vice Project Leader, RIKEN CSRS)

Plant Symbiosis Research for Agricultural and Environmental Sustainability

Session4: Metabolic Genome Engineering

Dr. Akihiko Kondo (Project Leader, RIKEN CSRS)

Metabolic genome engineering project: Overview and examples in microorganisms

Prof. Anne Osbourn (Professor, John Innes Centre)

Finding drugs in the garden: Harnessing plant metabolic diversity

Dr. Masami Hirai (Vice Project Leader, RIKEN CSRS)

Approaches to metabolic genome engineering of plant

Session5: Early career scientists

Dr. Sobi Asako (Senior Scientist, RIKEN CSRS)

Towards Sustainable Organic Synthesis Using Sodium

Dr. Miki Fujita (Research Scientist, RIKEN CSRS)

Plant Phenomics: Linking Plant Science and the Future of Agriculture

Dr. Masanori Izumi (Senior Scientist, RIKEN CSRS)

Dissecting a recycling system in plants– towards the development of sustainable agricultural production