

Winners of the 2018 Mitsui Chemicals Catalysis Science Awards

Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: Tsutomu Tannowa) is pleased to announce the winners of the 2018 Mitsui Chemicals Catalysis Science Award and the Mitsui Chemicals Catalysis Science Award of Encouragement.

Established in 2004, these awards aim to contribute to the sustainable development of chemistry and the chemical industry by recognizing researchers who have made outstanding achievements in catalysis science. The first winners were awarded in March 2005.

Now in its seventh iteration, this year's awards again saw numerous applicants.

The awards will be presented on October 23 at the "8th CSJ Chemistry Festa 2018", which will be held at the Tower Hall Funabori in Edogawa-ku, Tokyo, and followed by commemorative lectures by the winners.

Winner of the 2018 Mitsui Chemicals Catalysis Science Award

Professor M. Christina White
 University of Illinois, U.S.A.



Winners of the 2018 Mitsui Chemicals Catalysis Science Award of Encouragement

Dr. Kounosuke Oisaki
 The University of Tokyo, Japan



Professor Robert R. Knowles
 Princeton University, U.S.A.



Addendum

1. Overview of the awards

Winner of the 2018 Mitsui Chemicals Catalysis Science Award

Professor M. Christina White

University of Illinois, U.S.A.

“Site-Selective Aliphatic and Allylic C—H Oxidations for Late-Stage Functionalization”

Dr. M. Christina White has made pioneering contributions to the development of catalytic allylic and aliphatic C—H oxidations. Previously, substrates required directing groups to achieve selective C—H oxidations. However, she found that site-selectivities could be altered through the appropriate modification of transition metal catalysts for late-stage functionalization of complex molecules, which is a promising synthetic strategy at the forefront of chemical and pharmaceutical sciences.

Winners of the 2018 Mitsui Chemicals Catalysis Science Award of Encouragement

Dr. Kounosuke Oisaki

The University of Tokyo, Japan

“Chemoselective Transformations by Radical-Conjugated Redox Catalysis: From Functional Small Molecules to Biomacromolecules”

Dr. Kounosuke Oisaki has examined the applications of radical-conjugated redox catalysis, which is the combination of one-electron redox catalysts with organoradicals, for selective organic transformations, and has demonstrated that this approach is applicable to even complex biomacromolecules, such as proteins.

Professor Robert R. Knowles

Princeton University, U.S.A.

“Proton Coupled Electron Transfer in Organic Synthesis”

Dr. Robert R. Knowles has pioneered of the “Proton-Coupled Electron Transfer” (PCET) with photoredox catalysis for the generation of synthetically useful radicals, and thereby established a new vista of high impact and versatility in organic synthesis. In particular, his creative contributions include the extensive development of Ir(III) photocatalytic systems that effectively induce oxidative or reductive PCET for the synthesis of fine chemicals and complex natural products.

2. Award ceremony and lectures by the winners

Mitsui Chemicals will be holding a ceremony for the Catalysis Science Award and the Catalysis Science Award of Encouragement along with commemorative lectures as part of a catalysis science session at the “8th CSJ Chemistry Festa 2018”.

1. Date: October 23, 2018
2. Venue: Tower Hall Funabori, Edogawa-ku, Tokyo, Japan
3. Lectures: Plenary lectures
 - Professor Nobuharu Iwasawa, (Tokyo Institute of Technology, Japan)
 - Professor Ilhyong Ryu, (Osaka Prefecture University, Japan)Commemorative lectures by the winners
2018 Mitsui Chemicals Catalysis Science Award
 - Professor M. Christina White (University of Illinois, U.S.A.)2018 Mitsui Chemicals Catalysis Science Award of Encouragement
 - Dr. Kounosuke Oisaki (The University of Tokyo, Japan)
 - Professor Robert. R. Knowles (Princeton University, U.S.A.)