

*The Second Japanese-Spanish Symposium
on
Organic Synthesis*



Supported by a Grant-in-Aid for Scientific Research on Innovative Areas "Hybrid Catalysis" from the Ministry of Education, Culture, Sports, Science and Technology, Japan

*Organized by Keiji Maruoka (Chairman), Motomu Kanai,
Takashi Ooi, and Masahiro Terada*

May 28 ~ 29, 2018
Seminar House in the Graduate School of Science
Kyoto University



The Second Japanese-Spanish Symposium on Organic Synthesis

May 28 (Mon) – 29 (Tue), 2018

Venue: Seminar House in the Graduate School of Science, Kyoto University

Detailed Programme

Monday 28 May

9:00 - 9:10 Opening Remarks: **Keiji Maruoka** (Kyoto University)

[Chairperson : Keiji Maruoka]

9:10 - 9:40 Keynote Lecture 1 : **Kilian Muñiz** (ICIQ)

"Amidyl Radicals in Non-Canonical C-H Amination: Design, Scope and Applications"

9:40 - 10:10 Keynote Lecture 2 : **Motomu Kanai** (The University of Tokyo)

"Protecting Group-Minimized Asymmetric Catalysis"

10:10 - 10:40 Keynote Lecture 3 : **Claudio Palomo** (University of the Basque Country)

"Transiently Generated Enolate Systems: A Catalytic Brønsted Base/ H-Bond Activation Approach"

10:40 - 11:00 Break

[Chairperson : Motomu Kanai]

11:00 - 11:30 Keynote Lecture 4 : **Yoichiro Kuninobu** (Kyushu University)

"Development of Regioselective C-H Bond Transformations"

11:30 - 12:00 Keynote Lecture 5 : **Mariola Tortosa** (Autonomous University Madrid)

"Synthesis of Versatile Synthetic Intermediates through Copper Catalysis"

12:00 - 12:30 Keynote Lecture 6 : **Takashi Ooi** (Nagoya University)

"Ion-Pair Catalysis for Selective Organic Synthesis"

12:30 - 13:30 Poster Session

[Chairperson : Tetsuya Shishido]

13:30 - 14:00 Keynote Lecture 7 : **José M. González** (University of Oviedo)

"Catalytic Activation of Heteroatom-Substituted Unsaturated Systems: Synthetic Applications"

14:00 - 14:30 Keynote Lecture 8 : **Keiji Maruoka** (Kyoto University)

"Advantage of Chiral Amino Organocatalysts over Proline in Asymmetric Enamine Catalysis: A Good Harmony with Water"

14:30 - 15:00 Keynote Lecture 9 : **Antonio Echavarren** (ICIQ)

"New Gold-Catalyzed Cyclizations for the Synthesis of Natural Products"

15:00 - 15:10 Communication 1 : **Masazumi Tamura** (Tohoku University)

"Direct Synthesis of Valuable Chemicals from CO₂ over Heterogeneous CeO₂ Catalyst"

15:10 - 15:20 Communication 2 : **Naoki Ishida** (Kyoto University)

"Explorations of Metathesis Type Reactions between C-C, C-Si, and Si-Si σ -Bonds"

15:20 - 15:40 Break

[Chairperson : Takashi Ooi]

- 15:40 - 15:50 Communication 3 : **Tatsuhiko Yoshino** (Hokkaido University)
*"New Strategy for Asymmetric C-H Bond Functionalization Using Cp*M(III) Catalysts"*
- 15:50 - 16:00 Communication 4 : **Hirofumi Ueda** (Tohoku University)
"Synthetic Studies on Dimeric Indole Alkaloids"
- 16:00 - 16:30 Keynote Lecture 10 : **Sonsoles Martín-Santamaría** (CIB-CSIC Madrid)
"Computational Exploration of Pattern Recognition Receptors: Toll-like Receptor 4 and Lectins"
- 16:30 - 17:00 Keynote Lecture 11 : **Masahiro Terada** (Tohoku University)
"Chiral Bis(guanidino)iminophosphorane as Organosuperbase Catalyst"
- 17:00 - 17:30 Keynote Lecture 12 : **Paolo Melchiorre** (ICIQ)
"Organic Synthesis in the Excited State"

Tuesday 29 May

[Chairperson : Masahiro Terada]

- 8:50 - 9:20 Keynote Lecture 13 : **Hirohisa Ohmiya** (Kanazawa University)
"Umpolung Transformations Using Aldehydes by Synergistic Catalysis"
- 9:20 - 9:50 Keynote Lecture 14 : **Jose L. Vicario** (University of the Basque Country)
"Organocatalytic Activation of Strained Molecules"
- 9:50 - 10:30 Keynote Lecture 15 : **Kei Ohkubo** (Osaka University)
"Photodriven C-H Oxygenation of Methane by Molecular Oxygen with Chlorine Dioxide"
- 10:30 - 10:50 Break
- [Chairperson : Hirohisa Ohmiya]**
- 10:50 - 11:20 Keynote Lecture 16 : **Tetsuya Shishido** (Tokyo Metropolitan University)
"Design of High-Performance Alloy catalysts: Enhancing Activity and Switching Selectivity by the Incorporation of Palladium into Gold Nanoparticles"
- 11:20 - 11:50 Keynote Lecture 17 : **Felix Freire** (CIQUS, Santiago de Compostela University)
"Helical Sense Control of Stimuli-Responsive Helical Polymers"
- 11:50 - 12:20 Keynote Lecture 18 : **Hiroyuki Kusama** (Gakushuin University)
"Photochemically Promoted Intermolecular Coupling Reactions of Acylsilanes with Electrophiles"
- 12:20 - 12:25 Closing Remarks: **Kilian Muñiz** (ICIQ)