Program

TUESDAY, JULY 2, 2019

15:00–17:00 Registration

17:10–17:15 Opening Remarks: Naoto CHATANI

17:15–19:15 A
Chair: Naoto CHATANI

17:15–17:25 [A-1]
Of early days we discovered it. Exploratory as well as rationally designed approaches. ····18
Shinji MURAI
(Nara Institute of Science and Technology, Japan)

17:25–18:05 [A-2]
Molecular Editing through Enantioselective and Remote C-H Activation ····20
Jin-Quan YU
(Department of Chemistry, The Scripps Research Institute, USA)

18:05–18:35 [A-3]
Synthetic Studies on Alkaloids Utilizing C-H Functionalization ···24
Hidetoshi TOKUYAMA
(Tohoku University, Japan)

18:35–19:15 [A-4]
Development of Direct C-H Amination Reactions: Inner- versus Outer-Sphere Pathways ····26
Sukbok CHANG
(Institute for Basic Science (IBS) & Korea Advanced Institute of Science and Technology (KAIST), Korea)

19:15–20:30 Welcome Reception

WEDNESDAY, JULY 3, 2019

9:00–18:40 B
Chair: Masaya SAWAMURA

9:00–9:30 [B-1]
Creation of New Forms of Nanocarbons Enabled by C-H Activation ····28
Kenichiro ITAMI
(Nagoya University, Japan)

9:30–10:10 [B-2]
Site-Selective Aliphatic and Allylic C—H Oxidations for Late-Stage Functionalizations ····30
Maria Christina WHITE
(University of Illinois at Urbana-Champaign, USA)

10:10–10:40 [B-3]
Radical-Based Approach for Synthesis of Complex Natural Products ····32
Masayuki INOUE
(The University of Tokyo, Japan)

10:40–11:00 Coffee Break

Chair: Cristina NEVADO

11:00–11:40 [B-4]
Ring Construction by Pd-catalyzed C(sp^3)-H Activation ····36
Olivier BAUDOIN
(University of Basel, Switzerland)

11:40–12:10 [B-5]
Chelation-Assisted C-H Functionalization ····38
Naoto CHATANI
(Osaka University, Japan)

12:10–15:00 Lunch and Group Photo Shooting

Chair: Jin-Quan YU

15:00–15:30 [B-6]
Gold-catalyzed Cascade Cyclization Reactions via C-H Bond Cleavage ····40
Hiroaki OHNO
(Kyoto University, Japan)

15:30–16:10 [B-7]
C-C and C-H Functionalization of Ketones ····44
Guangbin DONG
(University of Chicago, USA)

16:10–16:30 Coffee Break

Chair: Yoshiaki NAKAO

16:30–17:00 [B-8]
Heterocycle Construction Based on Iridium-Catalyzed C(sp^3)-H Addition ····46
Toshimichi OHMURA
(Kyoto University, Japan)

17:00–17:40 [B-9]
The Quest for Efficient Ligands in Asymmetric C-H Functionalizations ····48
Nicolai CRAMER
(EPFL, Switzerland)

17:40–18:40 Flash Talk: Odd Number Posters (2min. each)
(01, 03, 05, 07, 09, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59)

18:40–19:30 Dinner

19:30–21:30 Poster Session I (Odd Number Posters)

THURSDAY, JULY 4, 2019

9:00–18:10 C

Chair: Kenichiro ITAMI

9:00–9:30 [C-1]
Chiral Acid-Enabled Achiral Rh(III)&Co(III)-Catalyzed Asymmetric C-H Bond Functionalization ……50
Shigeki MATSUNAGA
(Hokkaido University, Japan)

9:30–10:10 [C-2]
Metalloelectro-Catalyzed C-Activation ……52
Lutz ACKERMANN
(Georg-August-Universität Göttingen, Germany)

10:10–10:40 [C-3]
Synthesis, Reactivity, and Property of Antiaromatic Porphyrins …54
Hiroshi SHINOKUBO
(Nagoya University, Japan)

10:40–11:00 Coffee Break

Chair: Lutz ACKERMANN

11:00–11:40 [C-4]
C-H Functionalization Strategy for Synthesis of Complex Peptides and Carbohydrates ……56
Gong CHEN
(Nankai University, China)

11:40–12:10 [C-5]
Oxidative Functionalization of Proteins ……58
Motomu KANAI
(The University of Tokyo, Japan)

12:10–12:40 [C-6]
C-H Activation and Transformation by Rare-earth Catalysts ……60
Zhaomin HOU
(Advanced Catalysis Research Group, RIKEN Center for Sustainable Resource Science, Japan)

12:40–14:30 Lunch

Chair: Fumitoshi KAKIUCHI

14:30–15:00 [C-7]
Construction of Benzo-Fused Heterocycles through Aromatic C-H Functionalization ····62
Masahiro MIURA
(Osaka University, Japan)

15:00–15:40 [C-8]
The Electrophilic Aromatic Substitution Approach to C-H Silylation and C-H Borylation ····64
Martin OESTREICH
(Technische Universität Berlin, Germany)

15:40–16:00 Coffee Break

Chair: Shigeki MATSUNAGA

16:00–16:30 [C-9]
C-H Functionalization by Cooperative Metal Catalysis ····66
Yoshiaki NAKAO
(Kyoto University, Japan)

16:30–17:10 [C-10]
New Catalytic Strategies for C(sp^3)-H Activation in Alkylamines ···68
Matthew James GAUNT
(University of Cambridge, UK)

17:10–18:10 Flash Talk: Even Number Posters (2 min. each)
(02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58)

18:10–19:30 Dinner

19:30–21:30 Poster Session II (Even Number Posters)

FRIDAY, JULY 5, 2019

9:00–11:40 D
Chair: Motomu KANAI

9:00–9:30 [D-1]
Transition-metal-catalyzed Oxidative C-H Functionalization of Arenes by Electrochemical Oxidation ····70
Fumitoshi KAKIUCHI
(Keio University, Japan)

9:30–10:10 [D-2]
Convergent Synthesis of Pharmaceutically Relevant Compounds by New and Efficient C-H Functionalization Methods ····72
Jonathan A ELLMAN
(Yale University, USA)

10:10–10:30 Coffee Break

Chair: Nicolai CRAMER

10:30–11:10 [D-3]
Solving Mechanistic Puzzles in Metal-catalyzed Reactions ·····74
Cristina NEVADO
(Universitat Zurich, Switzerland)

11:10–11:40 [D-4]
Enantioselectve Methylene C(sp^3)-H Borylation ·····76
Masaya SAWAMURA
(Institute for Chemical Reacton Design and Discovery (WPI-ICReDD) and Faculty of Science, Hokkaido University, Japan)

11:40–11:45 Information of Naito Grants

11:45–11:50 Announcement of Award Winners

11:50–11:55 Closing Remarks: Naoto CHATANI

11:55–13:00 Lunch