

Curriculum Vitae

Kenta KATO Ph.D.

Assistant Professor

Waseda Research Institute for Science and Engineering

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Date of Birth: July 10, 1991



Education

- Mar 2014 B.Sc., Nagoya University, Japan (Prof. Kenichiro Itami)
- Aug.–Nov. 2015 Visiting student (Prof. Marina A. Petrukhina, University at Albany, USA)
- Mar 2016 M.Sc. in Chemistry, Nagoya University, Japan (Prof. Kenichiro Itami)
- Mar 2019 Ph.D. in Chemistry, Nagoya University, Japan (Prof. Kenichiro Itami)
Thesis title: Synthesis and Properties of Corannulene-based Nonplanar Aromatic Hydrocarbons

Academic Career

- Apr. 2019 Postdoctoral Researcher, Institute for Chemical Reaction Design and Discovery (WPI-ICReDD), Hokkaido University, Japan (Prof. Hajime Ito)
- Apr. 2020 Postdoctoral Researcher, Division of Applied Chemistry and Frontier Chemistry Center, Faculty of Engineering, Hokkaido University, Japan (Prof. Hajime Ito)
- Oct. 2020 Assistant Professor, Waseda Research Institute for Science and Engineering, Waseda University, Japan (Prof. Junichiro Yamaguchi)

Publications

- (1) **Synthesis, Properties, and Packing Structures of Corannulene-Based π -Systems Containing Heptagons**
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
Chem. Asian J. **2015**, *10*, 1635–1639.
- (2) **Phenanthro[9,10-*a*]corannulene by One-step Annulative π -Extension of Corannulene**
Kenta Kato, Yasutomo Segawa, Kenichiro Itami.
Can. J. Chem. **2017**, *95*, 329–333.
- (3) **A Quintuple [6]Helicene with a Corannulene Core as a C_5 -Symmetric Propeller-Shaped π -System**
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
Angew. Chem., Int. Ed. **2018**, *57*, 1337–1341. **Hot paper**
Highlighted on web site of the Cambridge Crystallographic Data Centre (CCDC); only two crystal data were highlighted of 20,004 data updated in 2018.
- (4) **Synthesis and Structure of a Propeller-Shaped Polycyclic Aromatic Hydrocarbon Containing Seven-Membered Rings**
Kazuya Kawai, Kenta Kato, Lingqing Peng, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
Org. Lett. **2018**, *20*, 1932–1935.
- (5) **Symmetric Multiple Carbohelicenes**
Kenta Kato, Yasutomo Segawa, Kenichiro Itami.
Synlett **2019**, *30*, 3070–377.
- (6) **Synthesis and Structural Features of Thiophene-fused Analogues of Warped Nanographene and Quintuple Helicene**
Hsing-An Lin, Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
Chem. Sci. **2019**, *10*, 2326–2330.
- (7) **Six-fold C–H borylation of hexa-peri-hexabenzocoronene**
Mai Nagase, Kenta Kato, Akiko Yagi, Yasutomo Segawa, Kenichiro Itami
Beilstein J. Org. Chem. **2020**, *16*, 391–397.

Oral Presentation

- (1) **Synthesis, Properties, and Packing Structures of Corannulene-Based π -Systems Containing Heptagons**
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
The 96th Chemical Society of Japan Annual Meeting
Doshisha University, Kyoto, Japan, March 27, 2016.
- (2) **Synthesis and Structures of a Quintuple [6]helicene with a Corannulene Core**
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
The 98th Chemical Society of Japan Annual Meeting
Nihon University, Chiba, Japan, March 21, 2018.
- (3) **Synthesis and Structure of Corannulene-Based Quintuple [6]helicene**
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
Enabling Excellence Japanese-European Workshops
Nagoya University, Nagoya, Japan, May 28, 2018. *Student Presentation Award*
- (4) **Creation of Grossly Warped Nanographene**
Kenta Kato
The 9th Otsu Conference
Otsu Prince Hotel, Shiga, Japan, October 22, 2018.
- (5) **One-dimensional Self-assembly of a Negatively Curved Aromatic Hydrocarbon**
Kenta Kato, Yuh Hijikata, Jenny Pirillo, Taishi Nishihara, Yusuke Nakanishi, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami
The 99th Chemical Society of Japan Annual Meeting
Konan University, Hyogo, Japan, March 18, 2019.
- (6) **Ten-fold Functionalization of Warped Nanographene through an Ir-catalyzed C–H Borylation**
Kenta Kato, Hsing-An Lin, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami.
The 99th Chemical Society of Japan Annual Meeting
Konan University, Hyogo, Japan, March 18, 2019.
- (7) **Gold(I) Complexes Exhibiting Both Photo- and Thermosensitive Effect**
Kenta Kato
Ace Meeting Online
Virtual, May 2, 2020.

Awards, Honor and Fellowships

- (1) Japan Society for the Promotion of Science Research Fellowship for Young Scientists (DC) for 2017
- (2) ISNA'17 Poster Award, 17th International Symposium on Novel Aromatic Compounds in 2017
- (3) Chemical Society of Japan Student Presentation Award 2018
- (4) Poster Award, 29th Symposium on Physical Organic Chemistry in 2018
- (5) Selected as the 9th Otsu Conference Fellow in 2018
- (6) ISNA'18 Poster Award, 18th International Symposium on Novel Aromatic Compounds in 2019
- (7) Japan Society for the Promotion of Science Research Fellowship for Young Scientists (PD) for 2020