

PhD seminar “Utilization of Energy of Photons for Organic Synthesis”

CURRICUL VITAE

Masahiro Murakami



1 Short CV

Masahiro Murakami is currently an emeritus professor in chemistry at Kyoto University, Japan. He studied chemistry at the University of Tokyo under the supervision of the late Professor Teruaki Mukaiyama, receiving his doctoral degree in science in 1984. He started his career with a research assistant position to Professor Mukaiyama at the same place. In 1987, he moved to Kyoto University to take a research assistant position to the late Professor Yoshihiko Ito. He took a leave from May in 1991 to March in 1992 to work for Professor Albert Eschenmoser at ETH Zürich as a post-doctoral fellow. Then, he came back to Kyoto, being promoted to Associate Professor in 1993 and Professor in 2002. He retired from Kyoto University in March, 2022. His research interests focus on the discovery of new, synthetically useful, and/or mechanistically interesting organic reactions. The utilization of photo-energy, solar energy in particular, for organic synthesis is currently his major concern. He is the author of more than 330 publications.

Professional Activities: The Chemical Society of Japan
 The Society of Synthetic Organic Chemistry, Japan
 American Chemical Society
 Royal Society of Chemistry

Honors: 1989 The Chemical Society of Japan Award for Young Chemists
 2004 The Chemical Society of Japan Award for Creative Work
 2008 Nagoya Silver Medal
 2013 Synthetic Organic Chemistry Award, Japan
 2014 Humboldt-Forschungspreis, Germany
 2019 The Arthur C. Cope Scholars Award, USA
 2019 The Chemical Society of Japan Award

2 Bibliometric data

H-index: 72 (scopus)

Citations: 15745 (by 8741 documents)

3 Selection of the 10 most relevant publications and/or patents

1. Synthesis of Tetraarylphosphonium Salts from Triarylphosphines and Aryl Bromides Exploiting Light and Palladium, D. Ikeshita, H. Shimura, S. Miyakawa, Y. Masuda, N. Ishida, M. Murakami, *Chem. Lett.*, **2022**, *51*, 522-524.
2. Photoinduced Hydrophosphination of Terminal Alkynes with Tri(*o*-tolyl)phosphine: Synthesis of Alkenylphosphonium Salts, D. Ikeshita, Y. Masuda, N. Ishida, M. Murakami, *Org. Lett.*, **2022**, *24*, 2504-2508.
3. 1,2-Acyl Migration with α -Imino Rhodium Carbenoids Leading to Substituted 1-Naphthols, T. Miura, S. Moritani, Y. Shiratori, M. Murakami, *Chem. Commun.*, **2022**, *58*, 2710-2713.
4. Synthesis, Structure, and Dynamics of Chiral Eight-Membered Cyclic Molecules with Thienylene and Cyclopropylene Units Alternately Connected, T. Miura, Y. Ishihara, T. Nakamuro, S. Moritani, Y. Nagata, M. Murakami, *Chem. Eur. J.* **2022**, *28*, e202103962.
5. Photoassisted Cross-Coupling Reaction of α -Chlorocarbonyl Compounds with Arylboronic Acids, N. Oku, M. Murakami, T. Miura, *Org. Lett.* **2022**, *24*, 1616-1619.
6. Photoinduced Reaction of Triarylphosphines with Alkenes Forming Fused Tricyclic Phosphonium Salts, Y. Masuda, M. Uno, M. Murakami, *Org. Lett.*, **2021**, *23*, 8445-8449.
7. Photoinduced Direct Addition of Alkylarenes to Imines, R. Tomono, T. Kawasaki, N. Ishida, M. Murakami, *Chem. Lett.*, **2021**, *50*, 1972-1974.
8. Photo-Driven Dehydrogenative Homo-Coupling of Benzylic C-H Bonds Forming Strained C-C Bonds, N. Ishida, M. Son, T. Kawasaki, M. Ito, M. Murakami, *Synlett*, **2021**, *32*, 2067-2070.
9. Visible Light-Driven Dehydrogenative Coupling of Primary Alcohols with Phenols Forming Aryl Carboxylates, T. Kawasaki, T. Tosaki, N. Ishida, M. Murakami, *Org. Lett.*, **2021**, *23*, 7683-7687.
10. Photocatalytic Cycloaddition Reaction of Triarylphosphines with Alkynes Forming Cyclic Phosphonium Salts, Y. Masuda, D. Ikeshita, M. Murakami, *Chem. Lett.*, **2021**, *50*, 1691-1694.