

CURRICULUM VITAE: Yoshihiro SOHTOME

Date of Birth: July 1, 1977
Nationality: Japanese
Present address: RIKEN, Synthetic Organic Chemistry Lab
2-1 Hirosawa, Wako, Saitama 351-0198, Japan
E-mail: sohtome@riken.jp

Career

2018 Senior Research Scientist
2011 Research Scientist
RIKEN, Synthetic Organic Chemistry Lab, Wako, Japan
Prof. Mikiko SODEOKA

2009 Assistant Professor
Department of Biotechnology and Life Science, Faculty of Technology
Tokyo University of Agriculture and Technology (TUAT), Tokyo, Japan
Prof. Kazuo NAGASAWA

2008 Research Fellow of the Japan Society for the Promotion of Science for Research Abroad
Department of Chemistry, Yale University, CT, USA
Prof. Andrew, D. HAMILTON

2006 Assistant Professor
Graduate School of Pharmaceutical Sciences, Faculty of Pharmaceutical
Sciences, The University of Tokyo, Tokyo, Japan
Prof. Masakatsu SHIBASAKI

EDUCATION

2006 Ph. D in Graduate School of Pharmaceutical Sciences
Faculty of Pharmaceutical Sciences, The University of Tokyo
Prof. Yuichi HASHIMOTO, Prof. Kazuo NAGASAWA

2005-2006 Research Fellow of the Japan Society for the Promotion of Science
2003 MS in Graduate School of Agricultural and Life Science,
Faculty of Agriculture, The University of Tokyo
Prof. Yoichi HAYAKAWA, Prof. Kazuo SHIN-YA

2001 BS in Department of Chemistry
Faculty of Science and Technology, Keio University, Yokohama, Japan
Prof. Minoru UEDA

Awards

2018 Lectureship Award, JSPS program, "*Precise Formation of a Catalyst Having a Specified Field for Use in Extremely Difficult Substrate Conversion Reactions*"

2016 Thieme Chemistry Journals Award 2016

2015 Banyu Chemist Award

2014 Incentive Award in Synthetic Organic Chemistry Japan

2013 Eisai Award for Synthetic Organic Chemistry Japan

2011 Young Scholar Lecture Series of The Chemical Society of Japan

2007 Tetrahedron Letters Most Cited Paper Award

2006 Tetrahedron Letters Most Cited Paper Award

2006 CSJ Student Presentation Award

Researcher ID: F-8010-2012

H-index: 20 (Feb, 2019)

Representative Papers

1. “Unveiling Epithiodiketopiperazine as a Non-Histone Arginine Methyltransferase inhibitor by Chemical Protein Methylation Analyses”
Y. Sohtome, T. Shimazu, B. Joaquin, S. Fujishiro, M. Akakabe, N. Terayama, K. Dodo, A. Ito, M. Yoshida, M. Sodeoka**
Chem. Commun. **54**, 9202-9205 (2018)
2. “Catalytic Enantioselective [3+2] Cycloaddition of α -Keto Ester Enolates and Nitrile Oxides”
S. L. Bartlett, Y. Sohtome,* D. Hashizume, P. S. White, M. Sawamura, J. S. Johnson, M. Sodeoka *
J. Am. Chem. Soc. **139**, 8661-8666 (2017)
3. “Naked *d*-Orbital in a Centrochiral Ni(II) Complex as a Catalyst for Asymmetric [3+2] Cycloaddition”
Y. Sohtome,* G. Nakamura, A. Muranaka, D. Hashizume,* S. Lectard, T. Tsuchimoto, M. Uchiyama, M. Sodeoka *
Nat. Commun. **8**, 14875 (2017)
4. “Solvent-Dependent Enantiodivergent Mannich-Type Reaction: Utilizing Conformational Flexible Guanidine/Bisthiourea Organocatalyst”
Y. Sohtome,* S. Tanaka, K. Takada, T. Yamaguchi, K. Nagasawa*
Angew. Chem. Int. Ed. **49**, 9254-9257 (2010)
5. “Entropy-Controlled Catalytic Asymmetric 1,4-Type Friedel-Crafts Reaction of Phenols Using A Conformationally Flexible Guanidine/Bisthiourea Organocatalyst”
Y. Sohtome,* S. Bongki, N. Horitsugi, R. Takagi, K. Noguchi, K. Nagasawa*
Angew. Chem. Int. Ed. **49**, 7299-7303 (2010)

Highly-cited Papers (over 100 citations)

1. “Development of Bis-Thiourea-type Organocatalyst for Asymmetric Baylis-Hillman Reaction”
Y. Sohtome, A. Tanatani, Y. Hashimoto, K. Nagasawa*
Tetrahedron Lett. **2004**, **45**, 5589-5592 (234 times).
<Tetrahedron Letters Most Cited Paper 2003-2006 Award>
<Tetrahedron Letters Most Cited Paper 2004-2007 Award>
2. “Guanidine-Thiourea Bifunctional Organocatalyst for the Asymmetric Henry (Nitroaldol) Reaction”
Y. Sohtome, Y. Hashimoto, K. Nagasawa*
Adv. Synth. Catal. **2005**, **347**, 1643-1648 (Catalytic C-C bond formation issue) (209 times).
<Most Cited Articles Published in 2005/2006>
<Selected as Highly Cited Paper in ESI>
3. “A Heterobimetallic Pd-La-Schiff Base Complex for *anti*-Selective Nitroaldol Reactions and Application to Short Synthesis of α -Adrenoceptor Agonists”
S. Handa, K. Nagawa, Y. Sohtome, S. Matsunaga,* M. Shibasaki*
Angew. Chem. Int. Ed. **2008**, **47**, 3230-3233 (153 times).
<Highlighted by SYNFACTS 2008, 5, 513>
<Selected as SYNFACTS of the Month>
4. “Diastereoselective and Enantioselective Henry (Nitroaldol) Reaction Utilizing Guanidine-Thiourea Bifunctional Organocatalyst”
Y. Sohtome, Y. Hashimoto, K. Nagasawa*
Eur. J. Org. Chem., 2006, 2894-2897 (142 times).
<Most Accessed Articles in 2006>
<Most Cited Articles Published in 2006/2007>
5. “Organocatalytic Asymmetric Nitroaldol Reaction: Cooperative Effects of Guanidine and Thiourea Functional Groups”
Y. Sohtome, N. Takemura, K. Takada, R. Takagi, T. Iguchi, K. Nagasawa*
Chem. Asian. J., 2007, **2**, 1150-1160 (110 times).
<Most Accessed Articles in 2006>
<Most Cited Articles Published in 2006/2007>