CURRICULUM VITAE: Yoshihiro SOHTOME

Date of Birth: July 1, 1977
Nationality: Japanese
Present address: RIKEN, Synthetic Organic Chemistry Lab
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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 March **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
Web of Science Citations: 1736, **Google Scholar Citations**: 1859

Representative Papers

1. "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**)
2. "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**)
3. "Selenium-Based *S*-Adenosylmethionine Analog Reveals the Mammalian Seven-Beta-Strand Methyltransferase METTL10 to Be an EF1A1 Lysine Methyltransferase"
   T. Shimazu, J. Barjau, Y. Sohtome, M. Sodeoka, Y. Shinkai*
   PLOS ONE. 9, e105394 (**2014**)
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, June, 2018)

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 (231 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) (207 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 (150 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 (140 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 (108 times).
   <Most Accessed Articles in 2006>
   <Most Cited Articles Published in 2006/2007>