

Curriculum Vitae

Minami Odagi

Assistant Professor (Fixed term)

Department of Biotechnology and Life Science,
Tokyo University of Agriculture and Technology
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Date of Birth

September 18, 1988

Citizenship

Japanese

Education

- | | |
|-----------|---|
| 2007–2011 | B.S. in Agriculture, Tamagawa University, Japan
(Prof. Yukiharu Sato), March 2011
Extramural research in Sagami Chemical Research Institute
(Dr. Hitoshi Kakitani, Enzyme engineering group) |
| 2011–2013 | M.S. Graduate Student in Life Science and Technology, Tokyo
University of Agriculture and Technology (Prof. Kazuo Nagasawa),
March 2013 |
| 2013–2015 | Ph.D. Graduate Student in Life Science and Technology, Tokyo
University of Agriculture and Technology (Prof. Kazuo Nagasawa),
September 2015 |
| 2015 | JSPS Research Fellowship for Young Scientists (DC2) |
| 2012 | Visiting Student (December), RWTH Aachen University, Germany,
(Prof. Magnus Rueping) |

Academic Career

- | | |
|--------------|---|
| 2015–Present | Assistant Professor, Tokyo University of Agriculture and Technology |
| 2017–2018 | Visiting Researcher, University of Florida, US, (Prof. Daniel Seidel) |

Publications *corresponding author

17. A. Nagata, Y. Akagi, S. S. Masoud, M. Yamanaka, A. Kittaka, M. Uesugi, M. Odagi, K. Nagasawa*
"Stereoselective Synthesis of Four Calcitriol Lactone Diastereomers at C23 and C25"
J. Org. Chem. **2019**, *Accepted*.
16. M. Odagi, H. Araki, C. Min, E. Yamamoto, T. J. Emge, M. Yamanaka,* D. Seidel*
"Insights into the Structure and Function of a Chiral Conjugate–Base–Stabilized Brønsted Acid Catalyst"
Eur. J. Org. Chem. **2019**, *2019*, 486–492.
15. M. Odagi,* Y. Yamamoto, K. Nagasawa*
"Total Synthesis of (+)-Gracilamine Based on Oxidative Phenolic Coupling Reaction and Determination of its Absolute Configuration"
Angew. Chem. Int. Ed. **2018**, *57*, 2229–2232.
14. M. Shiozawa, K. Iida, M. Odagi, M. Yamanaka, K. Nagasawa*
"A synthesis of 2,6,7–trisubstituted prenylated indole"
J. Org. Chem. **2018**, *83*, 7276–7280.
13. M. Kawaguchi, K. Nakano, K. Hosoya, T. Orihara, M. Yamanaka,* M. Odagi,* K. Nagasawa*
"Asymmetric Epoxidation of 1,4-Naphthoquinones Catalyzed by Guanidine-Urea Bifunctional Organocatalyst"
Org. Lett. **2018**, *20*, 2811–2815.
12. M. Odagi,* K. Furukori, K. Takayama, K. Noguchi, K. Nagasawa*
"Total Synthesis of Rishirilide B Based on Organocatalytic Oxidative Kinetic Resolution: Revision of Absolute Configuration of (+)-Rishirilide B"
Angew. Chem. Int. Ed. **2017**, *56*, 6609–6612.
11. M. Shashar, M. E. Belghasem, S. Matsuura, J. Walker, S. Richards, F. Alousi, K. Rijal, V. B. Kolachalama, M. Balcells, M. Odagi, K. Nagasawa, J. M. Henderson, A. Gautam, R. Rushmore, J. Francis, D. Kirchhofer, K. Kolandaivelu, D. H. Sherr, E. R. Edelman, K. Ravid, V. C. Chitalia*
"Targeting STUB1-tissue factor axis normalizes hyperthrombotic uremic phenotype without increasing bleeding risk"
Sci. Transl. Med. **2017**, *9*, eaam8475.
10. T. Kato, K. Yasui, M. Odagi,* K. Nagasawa*
"Guanidinium Hydroiodide/Cumene Hydroperoxide-Mediated Intermolecular Oxidative Coupling Reaction of β -Ketoamides with Oxindoles"
Adv. Synth. Catal. **2017**, *359*, 2881–2889.
9. M. Odagi,* K. Hosoya, Y. Yamamoto, K. Nagasawa*
"Oxidative kinetic resolution of *cis*-fused tricyclic 1-tetralone derivatives by guanidine-bisurea bifunctional organocatalyst"
Synlett **2017**, *28*, 1305–1309.
8. K. Yasui, K. Kojima, T. Kato, M. Odagi, M. Kato, K. Nagasawa*
"Guanidinium Iodide/Urea Hydrogen Peroxide–Catalyzed Azidation of Dicarboxyl Compounds with Trimethylsilyl Azide"
Tetrahedron **2017** *72*, 5350–5354.
7. M. Odagi,* Y. Yamamoto, K. Nagasawa*
"Asymmetric α -Amination of β -Keto Esters using Guanidine-Bisurea Bifunctional Organocatalyst"
Beilstein J. Org. Chem. **2016**, *12*, 198–203.

6. M. Odagi, K. Furukori, Y. Yamamoto, M. Sato, K. Iida, M. Yamanaka, K. Nagasawa*
"Origin of Stereocontrol in Guanidine-Bisurea Bifunctional Organocatalyst that Promotes α -Hydroxylation of Tetralone-Derived β -Ketoesters: Asymmetric Synthesis of β - or γ -Substituted Tetralone Derivatives via Organocatalytic Oxidative Kinetic Resolution"
J. Am. Chem. Soc. **2015**, *137*, 1909–1915.
5. M. Odagi, T. Watanabe, K. Nagasawa*
"Development of Guanidine-Bisurea Bifunctional Organocatalyst Bearing Chirality at the Inner and Outer Sides of the Urea Groups, and Application to Enantioselective α -Hydroxylation of Pyranoindolizine Intermediate for Camptothecin Synthesis"
Symmetry **2015** *7*, 43–52.
4. M. Odagi, K. Takayama, M. Sato, M. Yamanaka, K. Nagasawa*
"Development of Guanidine-Bisurea Bifunctional Organocatalyst with a Chiral Pyrrolidine Moiety and Application to α -Hydroxylation of Tetralone-Derived β -Keto Esters"
Molecules **2015**, *20*, 12590–12598.
3. M. Odagi, K. Takayama, K. Furukori, T. Watanabe, K. Nagasawa*
"Development of Novel Guanidine-Bisurea Bifunctional Organocatalysts and Their Application to Asymmetric α -Hydroxylation of Tetralone-Derived β -Keto Esters"
Aust. J. Chem. **2014**, *67*, 1017–1020.
2. T. Watanabe, M. Odagi, K. Furukori, K. Nagasawa*
"Asymmetric α -Hydroxylation of Lactone with Vinyllogous Pyridone using Guanidine-Urea Bifunctional Organocatalyst: Catalytic Enantioselective Synthesis of a Key Intermediate for (20S)-Camptothecin Analogues"
Chem. Eur. J. **2014**, *20*, 591–597.
1. M. Odagi, K. Furukori, T. Watanabe, K. Nagasawa*
"Asymmetric α -Hydroxylation of Tetralone Derived β -Ketoesters using Guanidine-Urea Bifunctional Organocatalyst in the Presence of Cumene Hydroperoxide"
Chem. Eur. J. **2013**, *19*, 16740–16745.

Reviews *corresponding author

7. K. Hosoya, M. Odagi, K. Nagasawa*
"Guanidine Organocatalysis for Enantioselective Carbon-Heteroatom Bond-forming Reactions"
Tetrahedron Lett. **2018**, *8*, 687–696.
6. Y. Akagi, A. Nagata, M. Odagi, K. Nagasawa*
"Synthetic studies of (23S,25R)-1,4,25-dihydroxyvitamin D₃ 26,23-lactone (calcitriol lactone) and its derivatives"
J. Steroid Biochem. Mol. Biol. **2018**, *177*, 240–246.
5. 小田木陽
"有機分子触媒反応を基盤とする(+)-Gracilamine の合成研究"
有機合成化学協会誌 **2018**, *76*, 434–437.
4. M. Odagi,* K. Furukori, Y. Yamamoto, K. Nagasawa*
"Total Synthesis of (+)-Linorexepine"
Heterocycles **2017**, *95*, 116–126.
3. 小田木陽
"有機分子触媒による脱芳香族化反応を基盤とした全炭素第四級不斉炭素構築法"
有機合成化学協会誌 **2017**, *75*, 1288–1289.
2. 小田木陽, 長澤和夫

"有機分子触媒を用いる不斉反応の開発と天然物合成への応用"

化学工業 2017, 68, 683–691.

1. 安井浩司, 小田木陽, 長澤和夫
"触媒的不斉酸化反応にも大活躍！—進化する環境にやさしい超原子価ヨウ素試薬"
化学 2014, 69, 70–71.

Books

1. K. Nagasawa, M. Odagi, M. Kato
"Conformationally Flexible Guanidine-(Thio)Urea Bifunctional Organocatalysts"
Guanidines as Reagents and Catalyst I (Philipp Selig, Ed.), Springer (2017), 157-178.
2. 小田木陽, 長澤和夫
"官能基複合型不斉グアニジン触媒と生理活性物質合成への応用"
有機触媒の化学 モノづくりのパラダイムシフト (日本化学会 編), 化学同人 (2016), 118-127.