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【略歴】

2009年3月	崇城大学 薬学部 薬学科	卒業
2011年3月	京都大学大学院 薬学研究科 創薬科学専攻	修士課程修了
2014年3月	京都大学大学院 薬学研究科 創薬科学専攻	博士後期課程修了
2014年4月	第一薬科大学 薬学部 育薬研究センター	助教
2015年11月	千葉大学大学院 理学研究科 化学コース	特任助教
2017年4月	千葉大学大学院 理学研究院 化学研究部門	特任助教
2020年5月	東京工業大学 理学院 化学系	助教
2024年10月	東京科学大学 理学院 化学系	助教

【受賞】

2013年3月	日本薬学会第133年会（横浜）優秀発表賞
2014年4月	平成25年度笹川科学研究奨励賞
2017年12月	2017年度有機合成化学協会 東レ研究企画賞
2025年2月	令和6年度理学院若手研究奨励賞

【発表論文】

1. S. Otaka, T. Sano, S. Sase, **S. Kuwano**, K. Goto*
“Isolable Cysteine Sulfenyl Iodide: Stabilization by a Molecular Cradle, Crystal Structure, and Biologically Relevant Reactivity”
ChemBioChem **2025**, 26, e202500619.
2. **S. Kuwano**, K. Fujisaki, K. Goto*
“Phosphine-mediated Reduction of a Selenocysteine Selenenyl Iodide to a Selenocysteine Selenol”
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3. **S. Kuwano**, J. Kikushima, T. Nakada, S. Sase, K. Goto*
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4. R. Masuda, T. Karasaki, S. Sase, **S. Kuwano**, K. Goto*
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(Selected as the “Hot paper” and “Inside cover”)
5. T. Inokuma, K. Hashimoto, T. Fujiwara, C. Sun, **S. Kuwano**, K. Yamada*
“Remote Electronic Effect of Chiral N-Heterocyclic Carbene Catalyst on an Asymmetric Benzoin Reaction”
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6. R. Masuda, **S. Kuwano**, K. Goto*
“Modeling Selenoprotein *Se*-Nitrosation: Synthesis of a *Se*-Nitrososelenocysteine with Persistent Stability”
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7. **S. Kuwano**, E. Takahashi, J. Kikushima, S. Sase, K. Goto*
“Efficient Oxyselenation and Aminosenation Utilizing a Selenenyl Iodide Based on the Characteristic Thermodynamics of Its Reaction with Olefins”
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8. K. Goto,* T. Sano, R. Masuda, S. Otaka, R. Kimura, S. Sase, **S. Kuwano**
“Stable Cysteine Sulfenic Acid: Synthesis by Direct Oxidation of a Thiol, Crystallographic Analysis, and Elucidation of Reactivities”
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9. T. Inokuma, K. Iritani, Y. Takahara, C. Sun, Y. Yamaoka, **S. Kuwano**, K. Yamada,*
“Remote electronic effect on the N-heterocyclic carbene-catalyzed asymmetric intramolecular Stetter reaction and structural revision of products”
Chem. Commun. **2023**, *59*, 5375–5378.
(Selected as the “Front cover”)
10. K. Yamada,* A. Yamauchi, T. Fujiwara, K. Hashimoto, Y. Wang, **S. Kuwano**, T. Inokuma
“Kinetic Resolution of alpha-Hydroxyamide via N-Heterocyclic Carbene-Catalyzed Acylation”

11. R. Masuda, **S. Kuwano**, S. Sase, M. Bortoli, A. Madabeni, L. Orian, K. Goto*
“Model Study on the Catalytic Cycle of Glutathione Peroxidase Utilizing Selenocysteine-Containing Tripeptides: Elucidation of the Protective Bypass Mechanism Involving Selenocysteine Selenenic Acids”
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(Selected as the “BCSJ Award” and “Front cover”)

12. Y. Wang, A. Yamauchi, K. Hashimoto, T. Fujiwara, T. Inokuma, Y. Mitani, K. Ute, **S. Kuwano**, Y. Yamaoka, K. Takasu,* K. Yamada.*
“Enhanced Molecular Recognition through Substrate–Additive Complex Formation in N-Heterocyclic-Carbene-Catalyzed Kinetic Resolution of α -Hydroxythioamides”
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13. E. Ogino, **S. Kuwano**, T. Arai*
“Chiral Aminomethylbinaphthol-catalyzed Diastereo- and Enantioselective Epoxidation of Trisubstituted Acrylonitriles”
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14. **S. Kuwano**, E. Takahashi, K. Ebisawa, Y. Ishikawa, S. Sase, K. Goto*
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15. R. Masuda, **S. Kuwano**, K. Goto*
“Late-Stage Functionalization of the Periphery of Oligophenylene Dendrimers with Various Arene Units via Fourfold C-H Borylation”
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16. **S. Kuwano**, E. Ogino, T. Arai*
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17. Y. Nishida, T. Suzuki, Y. Takagi, E. Amma, R. Tajima, **S. Kuwano**, T. Arai*
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Cycloaddition of 2-Alkenylindoles.”

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18. E. Ogino, A. Nakamura, **S. Kuwano**, T. Arai*

“Chiral C_2 -Symmetric Aminomethylbinaphthol as Synergistic Catalyst for Asymmetric Epoxidation of Alkylidenemalononitriles: Easy Access to Chiral Spirooxindoles”

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19. J. Ma, T. Suzuki, **S. Kuwano**, T. Arai*

“Catalytic Asymmetric Chlorination of α -Ketoesters Using N-PFB-PyBidine-Zn(OAc)₂”

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20. T. Suzuki, **S. Kuwano**, T. Arai*

“Non-bonding Electron Pair versus π -Electrons in Solution Phase Halogen Bond Catalysis: Povarov Reaction of 2-Vinylindoles and Imines”

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21. A. Nakamura, **S. Kuwano**, J. Sun, K. Araseki, E. Ogino, T. Arai*

“Practically Useful Chiral Dinuclear Benzyliminobinaphthoxy-Pd Catalyst for Asymmetric Mannich Reaction of Aldimines and Isatin-derived Ketimines with Alkylmalononitriles”

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22. **S. Kuwano**, Y. Nishida, T. Suzuki, T. Arai*

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“Chiral Benzazaborole-Catalyzed Regioselective Sulfonylation of Unprotected Carbohydrate Derivatives”

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24. T. Arai,* Y. Iimori, M. Shirasugi, R. Shinohara, Y. Takagi, T. Suzuki, J. Ma, **S. Kuwano**, H. Masu

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25. **S. Kuwano**, T. Suzuki, M. Yamanaka, R. Tsutsumi, T. Arai*
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33. Y. Wang, R. Oriez, **S. Kuwano**, Y. Yamaoka, K. Takasu, K. Yamada*
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