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EDUCATION & EXPERIENCE

2023 – present	Special Postdoctoral Researcher
	Natural Product Biosynthesis RU, RIKEN CSRS, JP
2020 – 2023	Postdoctoral Researcher
	Natural Product Biosynthesis RU, RIKEN CSRS, JP
2017 – 2020	Ph.D. in Agricultural Science
	Graduate School of Agricultural Science, Tohoku University, JP
2016 – 2017	Research Student
	Graduate School of Agricultural Science, Tohoku University, JP
2004 – 2016	M.S. in Environmental Engineering, Ocean University of China, CN
2009 – 2012	B.A. in English, Shandong University of Science and Technology, CN
2008 – 2012	B.S. in Engineering, Shandong University of Science and Technology, CN

AFFILIATIONS

Japan Society for Bioscience, Biotechnology, and Agrochemistry (JSBBA)
Society for Actinomycetes Japan (SAJ)

PUBLICATIONS

1. **Zheng, Y.**,† Sakai, K.,† Watanabe, K.,† Takagi, H., Shiozaki-Sato, Y., Misumi, Y., Miyanoiri, Y., Kurisu, G., Nogawa, T., Takita, R., Takahashi, S. "Iron-sulphur protein catalysed [4+2] cycloadditions in natural product biosynthesis". ***Nat. Commun.***, 15, 5779 (2024).

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2. **Zheng, Y.**, Morita, N., Takagi, H., Shiozaki-Sato, Y., Ishikawa, J., Shin-ya, K., Takahashi, S. "Alanyl-tRNA Synthetase-like Enzyme-Catalyzed Aminoacylation in Nucleoside Sulfamate Ascamycin Biosynthesis". ***ACS Catal.***, 14, 3533–3542 (2024).

3. Zhao Y., Zhang J., **Zheng Y.**, Shi J., Hu Z., Xie H., Guo Z., Liang S., Wu H. "Overlooked dissemination risks of antimicrobial resistance through green tide proliferation". ***Water Res*.** 268, 122714 (2025).

4. Zhao Y., Zhao Q., Liu D., Xie H., Zhang J., **Zheng Y.**, Xu X., Wu H., Hu Z. "Antibiotic resistomes and ecological risk elimination in field-scale constructed wetland revealed by integrated metagenomics and metatranscriptomics". ***J. Hazard. Mater*.** 480, 136045 (2024).

5. **Zheng, Y.**, Maruoka, M., Nanatani, K., Hidaka, M., Abe, N., Kaneko J., Sakai, Y., Abe, K., Yokota, A., Yabe, S. "High cellulolytic potential of the *Ktedonobacteria* lineage revealed by genome-wide analysis of CAZymes". ***J. Biosci. Bioeng.***, 131, 622–630 (2021).

6. Yabe, S., **Zheng, Y.**, Wang, C.M., Sakai, Y., Abe, K., Yokota, A., Donadio, S., Cavaletti, L., Monciardini, P. "*Reticulibacter mediterranei* gen. nov., sp. nov., within the new family *Reticulibacteraceae* fam. nov., and *Ktedonospora formicarum* gen. nov., sp. nov., *Ktedonobacter robiniae* sp. nov., *Dictyobacter formicarum* sp. nov. and *Dictyobacter arantiisoli* sp. nov., belonging to the class *Ktedonobacteria*". ***Int. J. Syst. Evol. Microbiol.***, 71, 004883 (2021).

7. **Zheng, Y.**, Wang, C.M., Sakai, Y., Abe, K., Yokota, A., Yabe, S. "*Dictyobacter vulcani* sp. nov., belonging to class *Ktedonobacteria*, isolated from soil of the Mt. Zao volcano". ***Int. J. Syst. Evol. Microbiol.***, 70, 1805–1813 (2020).

8. **Zheng, Y.**, Saitou, A., Wang, C.M., Toyoda, A., Minakuchi, Y., Sekiguchi, Y., Ueda, K., Takano, H., Sakai, Y., Abe, K., Yokota, A., Yabe, S. "Genome features and secondary metabolites biosynthetic potential of the class *Ktedonobacteria*". ***Front. Microbiol.***, 26, p893 (2019).

9. **Zheng, Y.**, Wang, C.M., Sakai, Y., Abe, K., Yokota, A., Yabe, S. "*Thermogemmatispora aurantia* sp. nov. and *Thermogemmatispora argillosa* sp. nov., within the class *Ktedonobacteria*, and emended description of the genus *Thermogemmatispora*". ***Int. J. Syst. Evol. Microbiol.***, 69, 1744–1750 (2019).

10. Wang, C.M., **Zheng, Y.**, Sakai, Y., Toyoda, A., Minakuchi, Y., Abe, K., Yokota, A., Yabe, S. "*Tengunoibacter tsumagoiensis* gen. nov., sp. nov., *Dictyobacter kobayashii* sp. nov., *Dictyobacter alpinus* sp. nov. and description of *Dictyobacteraceae* fam. nov. within the order *Ktedonobacterales* isolated from Tengu-no-mugimeshi, a soil-like granular mass of microorganisms, and emended descriptions of the genera Ktedonobacter and *Dictyobacter*". ***Int. J. Syst. Evol. Microbiol.***, 69, 1910–1918 (2019).

11. Yabe, S., Wang, C.M., **Zheng, Y.**, Sakai, Y., Abe, K., Yokota, A. "Formation of sporangiospores in *Dictyobacter aurantiacus* (class *Ktedonobacteria* in phylum Chloroflexi)". ***J. Gen. Appl. Microbiol.***, 65, 316–319 (2019).

12. Zhao, Y.G., **Zheng, Y.**, Tian, W.J., Bai, J., Feng, G., Guo, L., Gao, M.C. "Enrichment and immobilization of sulfide removal microbiota applied for environmental biological

remediation of aquaculture area". ***Environ. Pollut.***, 214, 307–313 (2016).

13. **Zheng, Y.**, Wang, X.Q., Zhao, Y.G., Feng, G., Shen, Z.C. "Effects of immobilization on community structure and function of sulfide oxidizing microbiota". ***Acta Microbiologica Sinica.***, 56, 1504–1512 (2016).
14. Feng, G., Zhao, Y.G., Shen, Z.C., Wu, Y.H., Wei, C.Y., Wen, F., **Zheng, Y.** "Vertical distribution of microbial community along the sulfide gradient in a sulfide-rich marine sediment model". ***Acta Scientiae Circumstantiae***, 36, 3169–3176 (2016).
15. **鄭 宇**, 高橋 俊二. "天然物生合成における[4+2]環化付加反応を触媒する鉄硫黄タンパク質". **バイオサイエンスとインダストリー*(B&I)***, 83(2), 116–119 (2025).