



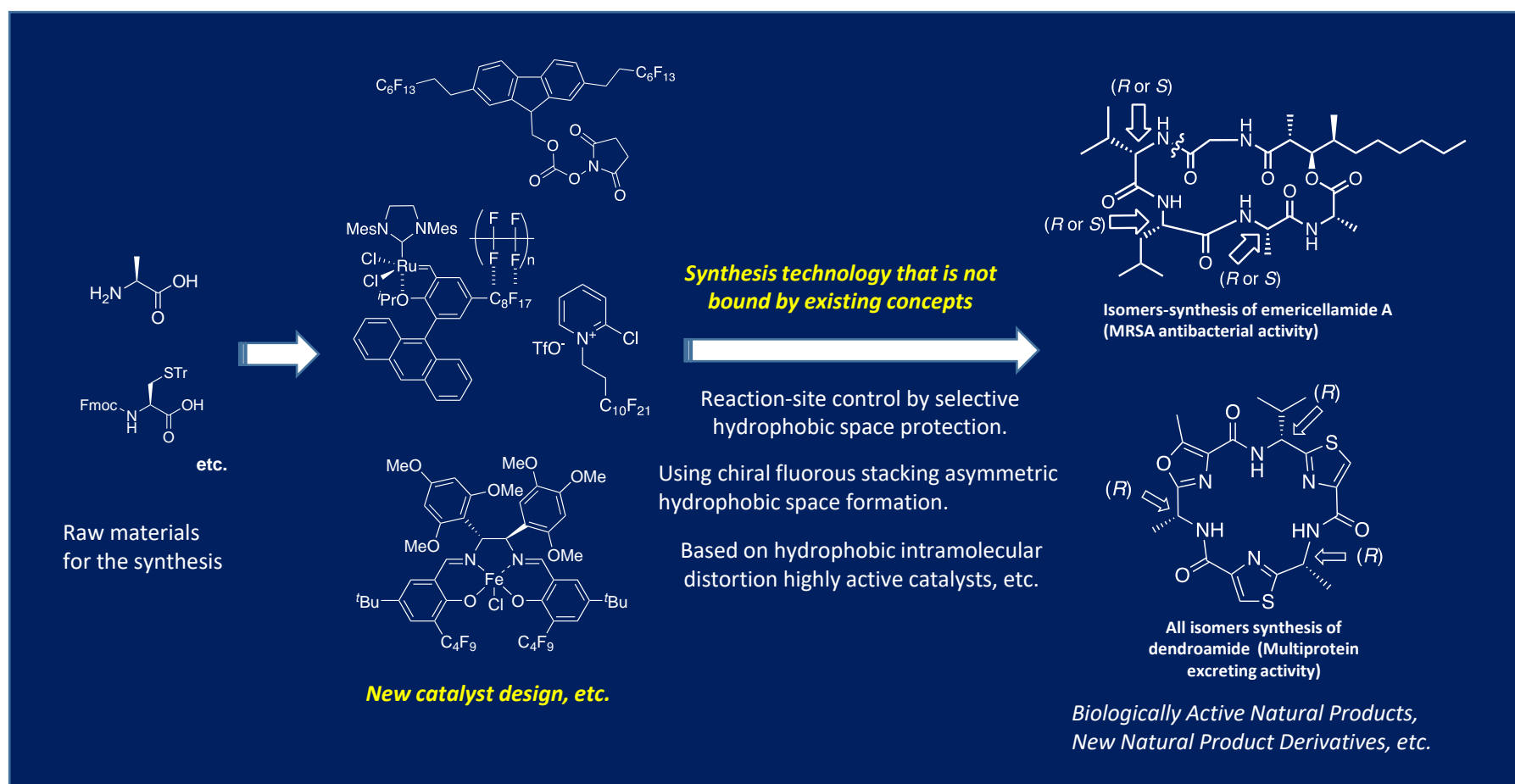
Professor
Masato MATSUGI

STAFF	Professor
TEACHING	Organic Chemistry I, Organic Chemistry II, Natural Products Organic Chemistry, Chemistry Laboratory, Applied Biochemistry Laboratory III, Introduction to Applied Biochemistry, Life, Food, and Environment, Seminar I, Seminar II, Graduation Research, Advanced Organic Chemistry, Special Studies in Bioorganic Chemistry I-VI, Special Lectures on Applied Biochemistry, Applied Biochemical Literacy

" Ultimate Manufacturing" at Molecular Level

We use creative methodologies to manipulate molecular properties at will, we can synthesize natural products and novel bioactive substances that do not exist in the natural world, and novel biologically active substances that do not exist in nature.

We aim to create a synthetic method that surpasses the yield, stereoselectivity, regioselectivity, and functional group selectivity of existing technologies, and to efficiently and precisely synthesize only molecules with the desired conformation.



Recent publications:

- Matsugi, M. *et al.*; Asymmetric Henry reaction using a double fluorous-tagged Co-salen complex. *Tetrahedron Lett.* **2022**, 95,153833.
- Matsugi, M. *et al.*; Synthesis of 1,5-disubstituted tetrazoles from nitrones using bis(*p*-nitrophenyl) phosphorazidate in the presence of 4-dimethylaminopyridine. *Synlett* **2022**, 33,781.
- Matsugi, M. *et al.*; Synthesis of carbamoyl azides via the Lossen rearrangement utilizing diphenyl phosphorazidate. *Tetrahedron Lett.* **2022**, 95, 153727.
- Matsugi, M. *et al.*; Practical synthesis of tetrazoles from amides and phosphorazidates in the presence of aromatic bases. *Tetrahedron* **2022**, 108, 132642.
- Shioiri, T. *et al.*; Cutting edge of diphenyl phosphorazidate (DPPA) as a synthetic reagent – A fifty-year odyssey. *Org. Chem. Front.* **2022**, 9, 3360.
- Matsugi, M. *et al.*; A fluorous proline catalyst immobilized on Teflon® for highly stereoselective asymmetric aldol reactions. *Heterocycles* **2021**, 103, 839.
- Matsugi, M. *et al.*; An expeditious approach to tetrazoles from amides utilizing phosphorazidates. *Org. Lett.* **2020**, 22, 6244.
- Matsugi, M. *et al.*; A recyclable and highly stereoselective multi-fluorous proline catalyst for asymmetric aldol reactions. *Tetrahedron Lett.* **2020**, 61, 151657.
- Matsugi, M. *et al.*; SN Ar azidation of phenolic functions utilizing diphenyl phosphorazidate. *Tetrahedron Lett.* **2020**, 61, 151493.