

HAN-P-07

Kenji Monde

Professor, Hokkaido University Email: kmonde@sci.hokudai.ac.jp



Website	https://altair.sci.hokudai.ac.jp/infchb/
Social Media Channel	https://www.facebook.com/profile.php? id=100011435296382
Research Field(s)	Sphingolipid Chemical Biology, Chiral Chemistry, SWIR (Short wavelength infrared) Imaging

Academic Career

B.S., 1984, Hokkaido University; Ph.D., 1993, Hokkaido University (advisor: Prof. T. Masamune, Prof. M. Takasugi); 1988-1993, Research Associate, Hokkaido University; 1994-1996, Postdoctoral Fellow, Columbia University (Professor K. Nakanishi); 1996-2000, Assistant Professor, Tohoku University (Professor N. Harada); 2001-2010, Associate Professor, Hokkaido University; 2010-Present, Professor, Hokkaido University; 2019-2023 Visiting Senior Research Fellow of RIKEN; 2019–2023

Selected Publications

1. Malabaricone C isolated from edible plants as a potential inhibitor of SARS-CoV-2 infection. Mutmainah, et al. Sci. Rep. in press (2025)

2. Biocompatible and water-soluble shortwave-infrared (SWIR) emitting cyanine-based fluorescent probes for in vivo multiplexed molecular imaging. Swamy, M. M. M., et al. 16, 17253-17266 (2024)

3. Shortwave-infrared (SWIR) emitting annexin V for high-contrast fluorescence molecular imaging of tumor apoptosis in living mice. Swamy, M. M. M., et al. RSC Advances, 12, 19632-19639 (2022)

4. Preparation of Carbodiimides with One-Handed Axial Chirality, Taniguchi, T., et al. J. Am. Chem. Soc., 140, 15577-15581 (2018)

5. Structure-inspired design of a sphingolipid mimic sphingosine-1-phosphate receptor agonist from a naturally occurring sphingomyelin synthase inhibitor. Swamy, M. M. M., et al. Chem. Commun., 54, 12758 - 12761 (2018)

Why My Lab?

My lab can offer high-resolution NMR, and mass spectrometry, as well as equipment for normal UV-VIS and fluorescence spectroscopy, especially for a full set of chiroptical spectroscopy. The laboratory also has access to a high-precision computer capable of performing DFT calculations. Cell culture and high-throughput assay equipment for bioassays is also available. We have had PhD students from India, Malaysia, Indonesia, Mongolia, Egypt, etc., who have graduated successfully, and we currently have two Indians and one Ethiopian student enrolled.