

CURRICULUM VITAE

Harunobu MITSUNUMA

Graduate School of Pharmaceutical Sciences, Prof. Kanai Group

The University of Tokyo

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Tel: (+81)-3-5841-4833

FAX: (+81)-3-5864-5206

E-mail: h-mitsunuma@mol.f.u-tokyo.ac.jp

Education/Career

2010.3 BS

Graduate School of Pharmaceutical Sciences, The University of Tokyo

Under the supervision of Prof. Masakatsu Shibasaki

2012.3 Master

Graduate School of Pharmaceutical Sciences, The University of Tokyo

Under the supervision of Prof. Motomu Kanai

2015.3 Ph.D.

Graduate School of Pharmaceutical Sciences, The University of Tokyo

Under the supervision of Prof. Motomu Kanai

2015.4-2017.10 Research Scientist

Sumitomo Dainippon Pharma Co., Ltd.

Drug Development Chemistry Group I, Drug Development Research Laboratories

2017.10-2017.12 Postdoctoral Fellows

Graduate School of Pharmaceutical Sciences, The University of Tokyo

Under the supervision of Prof. Motomu Kanai

2018.1-present Assistant Professor

Graduate School of Pharmaceutical Sciences, The University of Tokyo

Under the supervision of Prof. Motomu Kanai

2012.8-2012.12 Visiting Scientist

Department of Chemistry, University of California, Berkeley

Under the supervision of Prof. John F. Hartwig

Fellowship

2012.4-2015.3 Research Fellow of the Japan Society for the Promotion of Sciences (DC1)

Publication

1. Catalytic Asymmetric Allylation of Aldehydes with Alkenes Mediated by Organophotoredox and Chiral Chromium Hybrid Catalysis

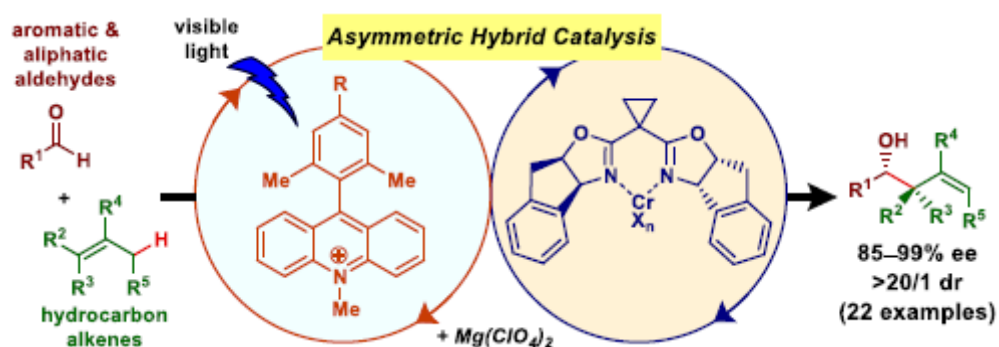
Mitsunuma, H.*; Tanabe, S.; Fuse, H.; Ohkubo, K.; Kanai, M.*

Chem. Sci. **2019**, doi: 10.1039/C8SC05677C

*Highlighted by UT press release, Chem.Sci. Special Movie, 日経産業新聞

*Selected as 2019 Chemical Science HOT Article Collection and 2019 ChemSci Pick of the Week Collection

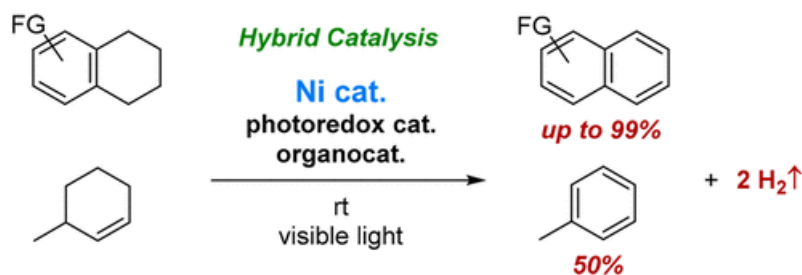
*Selected as Inside Front Cover



2. Acceptorless Dehydrogenation of Hydrocarbons by Noble-Metal-Free Hybrid Catalyst System

Fuse, H.; Kojima, M.; **Mitsunuma, H.**; Kanai, M.

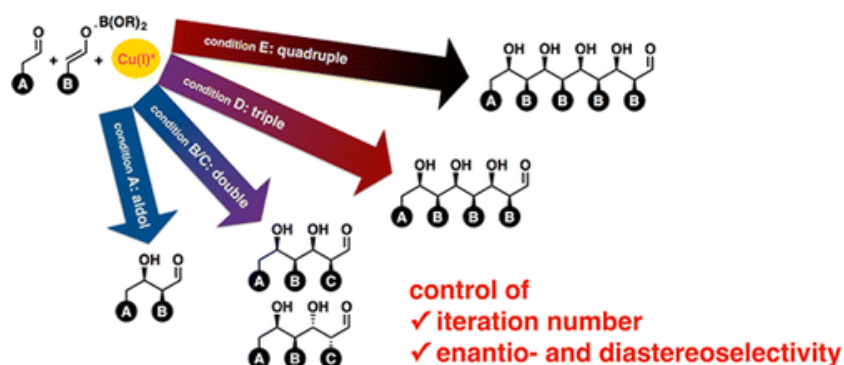
Org. Lett. **2018**, *20*, 2042–2045.



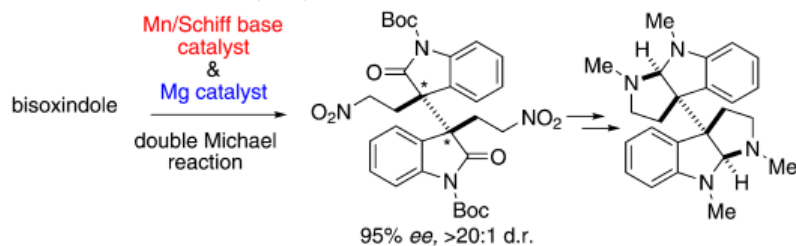
3. Catalytic Asymmetric Iterative/Domino Aldehyde Cross-Aldol Reactions for the Rapid and Flexible Synthesis of 1,3-Polyols.

Lin, L.; Yamamoto, K.; **Mitsunuma, H.**; Kanzaki, Y.; Matsunaga, S.; Kanai, M.

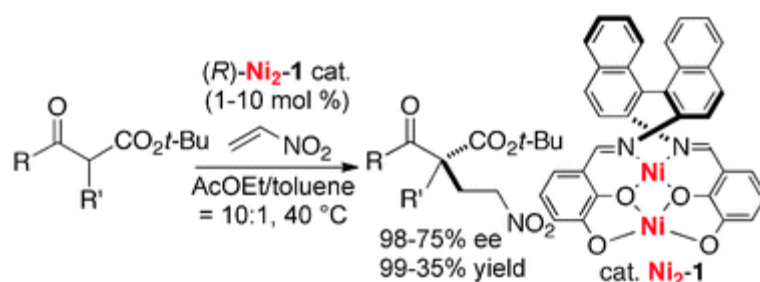
J. Am. Chem. Soc. **2015**, *137*, 15418–15421.



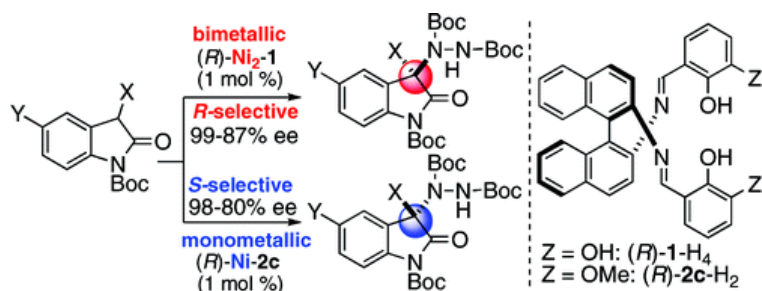
4. Catalytic Asymmetric Total Synthesis of Chimonanthine, Folicanthine, and Calycanthine via Double Michael Reaction of Bisoxindole
Mitsunuma, H.; Shibasaki, M.; Kanai, M.; Matsunaga, S.
Angew. Chem. Int. Ed. **2012**, *51*, 5217-5221.



5. Dinuclear Ni₂-Schiff base complex-catalyzed asymmetric 1,4-addition of β-keto esters to nitroethylene toward γ^{2,2}-amino acid synthesis
Mitsunuma, H.; Matsunaga, S.
Chem. Commun. **2011**, *47*, 469-471.

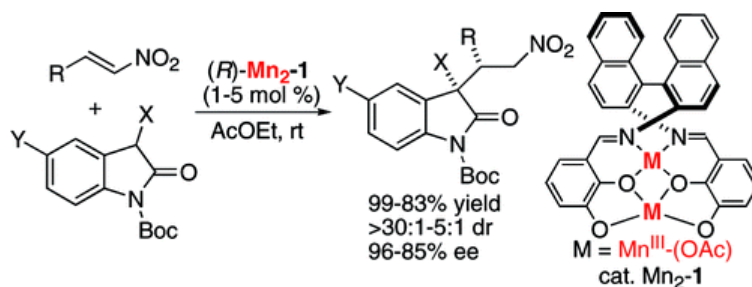


6. Catalytic Asymmetric Synthesis of 3-Aminooxindoles: Enantiofacial Selectivity Switch in Bimetallic vs Monometallic Schiff Base Catalysis
 Mouri, S.; Chen, Z.; Mitsunuma, H.; Furutachi, M.; Matsunaga, S.; Shibasaki, M.
J. Am. Chem. Soc. **2010**, *132*, 1255-1257.



7. A Homodinuclear Mn(III)₂-Schiff Base Complex for Catalytic Asymmetric 1,4-Additions of Oxindoles to Nitroalkenes.

Kato, Y.; Furutachi, M.; Chen, Z.; Mitsunuma, H.; Matsunaga, S.; Shibasaki, M.
J. Am. Chem. Soc. **2009**, *131*, 9168-9169.



References

Motomu Kanai, Ph.D., Professor

Graduate School of Pharmaceutical Sciences, The University of Tokyo

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Tel: (+81)-3-5841-4830

FAX: (+81)-3-5864-5206

E-mail: kanai@mol.f.u-tokyo.ac.jp

Shigeki Matsunaga, Ph.D., Professor

Faculty of Pharmaceutical Sciences, Hokkaido University

Kita-12 Nishi-6, Kita-ku, Sapporo 060-0812, Japan

Tel: (+81)-11-706-3236

FAX: (+81)-11-706-4981

E-mail: kanai@mol.f.u-tokyo.ac.jp