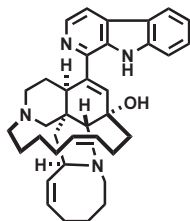


## S01-5 Chemistry in the synthesis of polycyclic nitrogen containing natural products

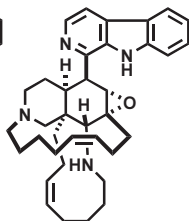
○Atsushi NISHIDA<sup>1</sup>

<sup>1</sup>Graduate School of Pharmaceutical Sciences, Chiba University

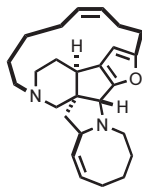
A total synthesis of polycyclic biologically active alkaloids is one of challenging theme in pharmaceutical sciences. I would like to discuss our contribution for the total synthesis of alkaloids, such as manzamine A and B, nakadomarin A, and lundurine A. For the synthesis of fused nitrogen containing heterocycles, we studied Diels-Alder reaction, furan-iminium cation cyclization, ring closing metathesis, and aromatic amination. Efficiency, selectivity, and practicability of these reactions will be discussed.



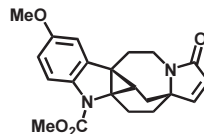
Manzamine A



Manzamine B



Nakadomarin A



(-)-Lundurine A