Zhou Group Mechanism Problems-20170212

**Problem -001**



*J. Org. Chem.* **2001***, 66,* 886

*Hints:* lntramolecular Mannich reaction.

**Problem -002**



*J. Org. Chem.* **2001***, 64,* 7025

*Hints:* Formation of a rhodium carbene，[3,3] Sigmatropic rearrangement via a chair-like transition state