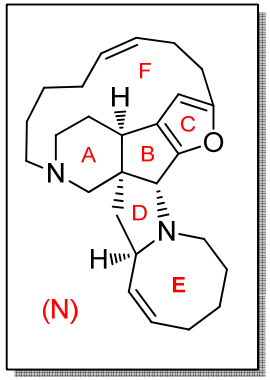
Concise Synthesis of (-)Nakadomarin A

Zacharias Amara
Doctorant 2ème année
Equipe Chimie Organique

(-) Nakadomarin A (**N**) is a complex marine alkaloid of the manzamine family. The challenging structure and impressive biological activities (anticancer & antimicrobial) have made **N** an attractive target compound for the synthetic community

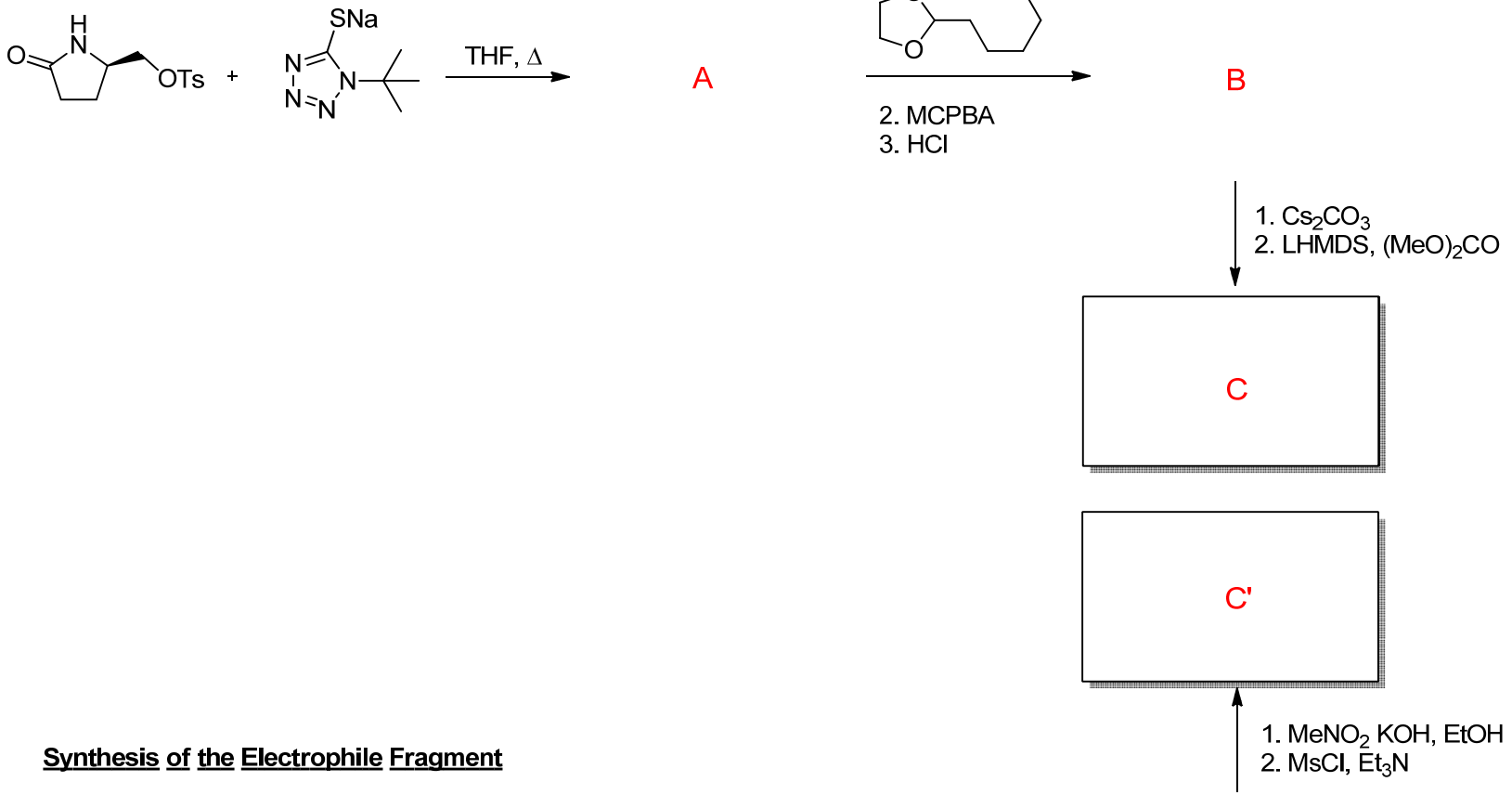


Let's have a look to Dixon's synthesis of **N**. The group has developped a strategic plan divided in two parts…

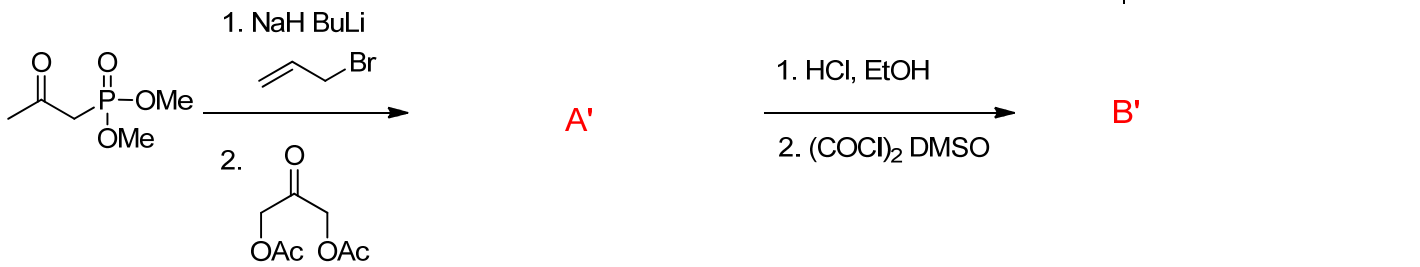
1. Find out compounds **A** to **F**
2. During the condensation step of **C**+**C'** to **D** two stereocenters are created. Explain the origin of stereoselectivity for each of them

Synthesis of (-)Nakadomarin A: Part 1

Synthesis of the Pro-Nucleophile Fragment



Synthesis of the Electrophile Fragment



Synthesis of (-)Nakadomarin A: Part 2