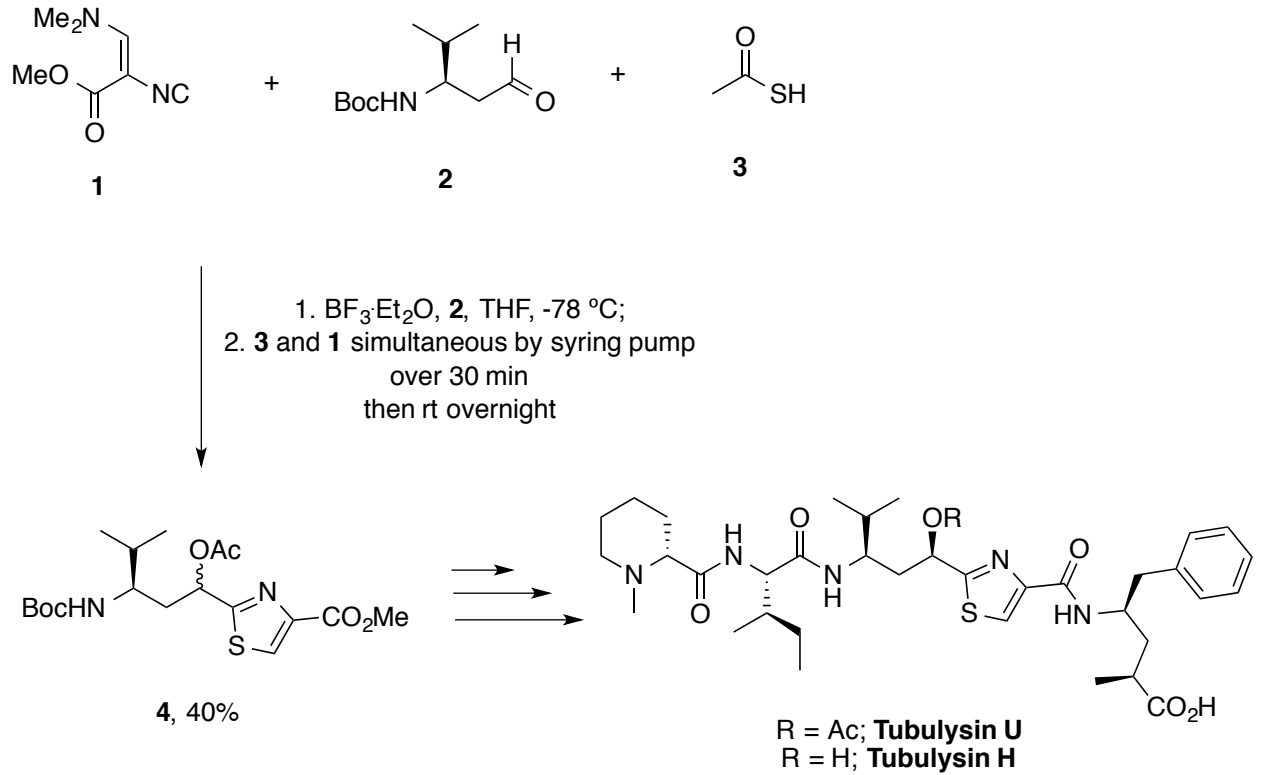
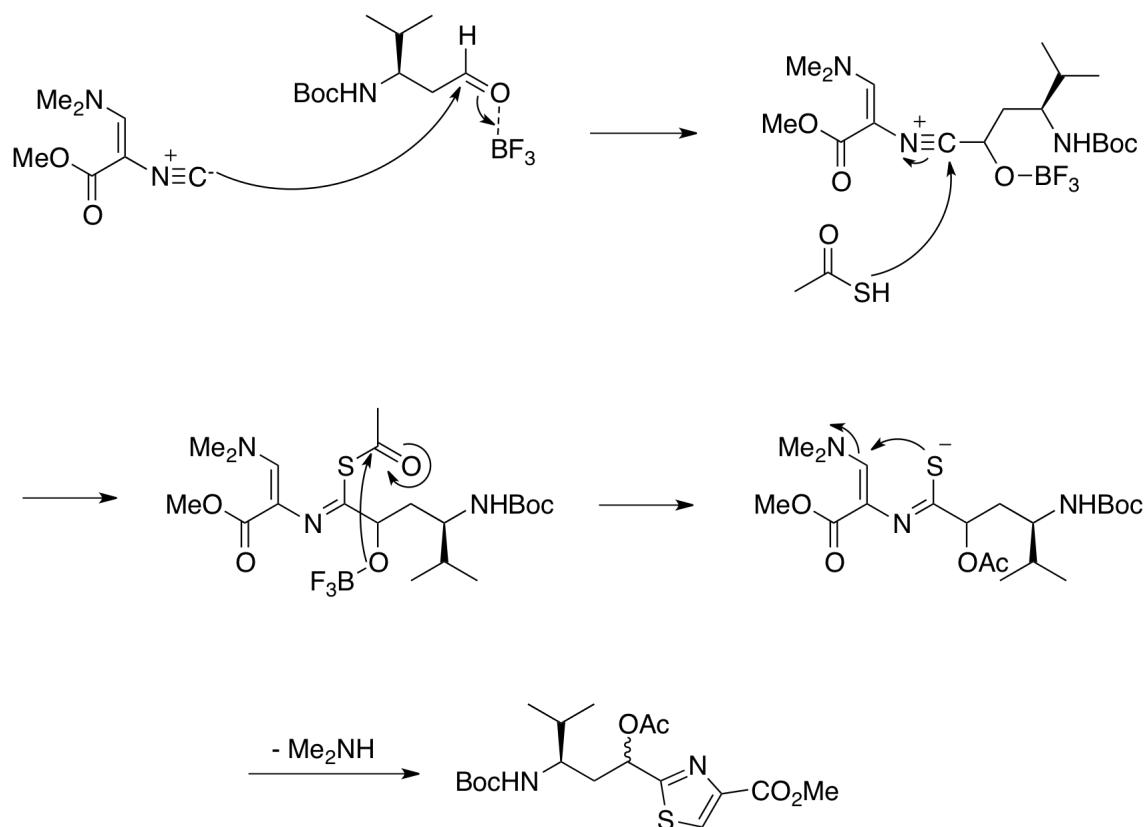


## Total Synthesis of Tubulysin U and V

Problem:



- Give the mechanism of this reaction.
- What is the name of this three-component reaction?

*Solution:***4***Comments:*

This reaction is not a classic Passerini multicomponent reaction. The classic reaction is carboxylic acid, carbonyl compound and isocyanide, that afford  $\alpha$ -acyloxycarboxamide. In this paper the changed the carboxylic acid to thioacetic acid.

*References:*

A. Dömling, B. Beck, U. Eichelberger, S. Sakamuri, S. Menon, Q.-Z. Chen, Y. Lu, L. A. Wessjohann, *Angew. Chem. Int. Ed.* **2006**, *45*, 7235-7239.

*Keywords:*

Passerini reaction