



## An Accelerated Intermolecular Rauhut-Currier Reaction Enables the ( )-Flueggenine C

Jeon, S.; Han, S. *J. Am Chem. Soc.* **2017**, *139*, 6302–6305.

Securinega alkaloids consisting of more than 70 natural products and are known since 1956

Recent isolation of bioactive natural products from *Flueggea virosa* enabled the isolation of various dimeric and oligomeric alkaloids expanding its structural repertoire

The biosynthesis of compounds **4** and **5** was reported using a self-catalyzed Baylis-Hilman reaction

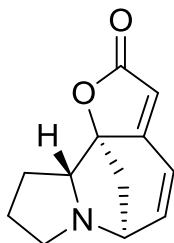
flueggenine A (**4**) showed modest cytotoxicity against the P-388 tumor cell line

Flueggenine D and fluevirosinine B exhibited promising anti-HIV activities

The first asymmetric total synthesis of flueggenine C (**6**), a C,C-linked dimeric securinega Alkaloid was achieved in this work.

# Natural products containing the DMOA (1) core

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Monomeric, dimeric and oligomeric alkaloids

# Retrosynthetic Analysis of Flueggenine C (6)

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N<sup>-</sup>

nucleophilic catalyst

# Possible modes of reactivity in Rauhut-Currier reactions

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Conventional Intermolecular RC Reaction





# Mechanistic explanation

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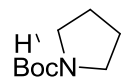
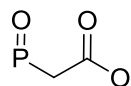
# Mechanistic explanation

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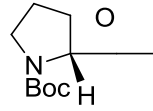
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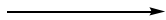
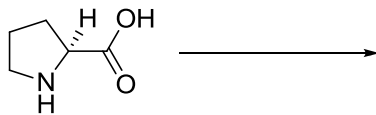
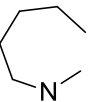


BocN

# Mechanistic explanation



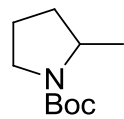
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# Mechanistic explanation

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