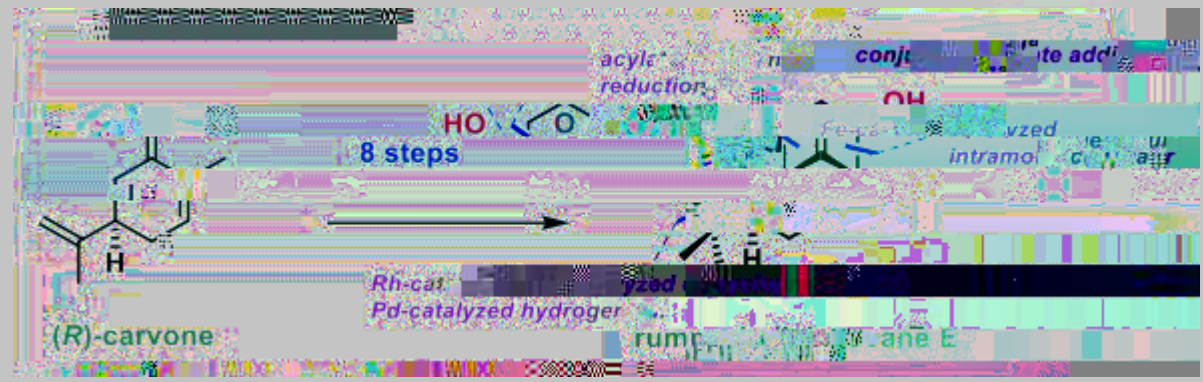


Asymmetric Total Synthesis of Rumphelleclovane E

Guanggen Liu,¹ Zhiyong Zhang,¹ Shengmin Fu,¹ and Bo Liu¹



- 1,2-addition of a nucleophile to an α,β-unsaturated carbonyl compound.
- 1,4-addition of a nucleophile to an α,β-unsaturated carbonyl compound.
- 1,4-reduction of an α,β-unsaturated carbonyl compound.
- 1,2-reduction of an α,β-unsaturated carbonyl compound.
- 1,4-reduction of an α,β-unsaturated carbonyl compound.
- 1,2-addition of a nucleophile to an α,β-unsaturated carbonyl compound.

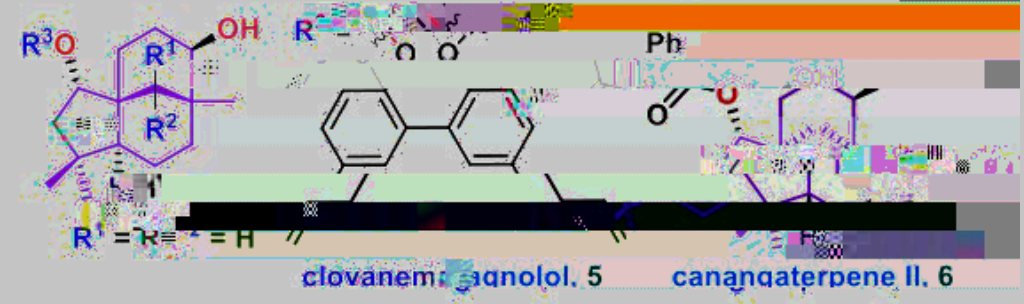
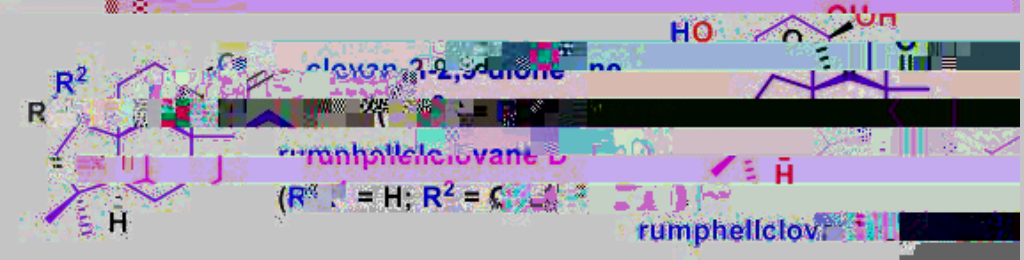
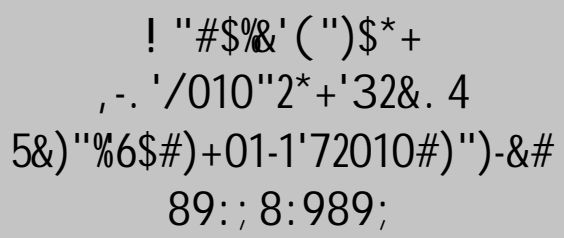


Figure 1. Asymmetric total synthesis of rumphelleclovane E.

