

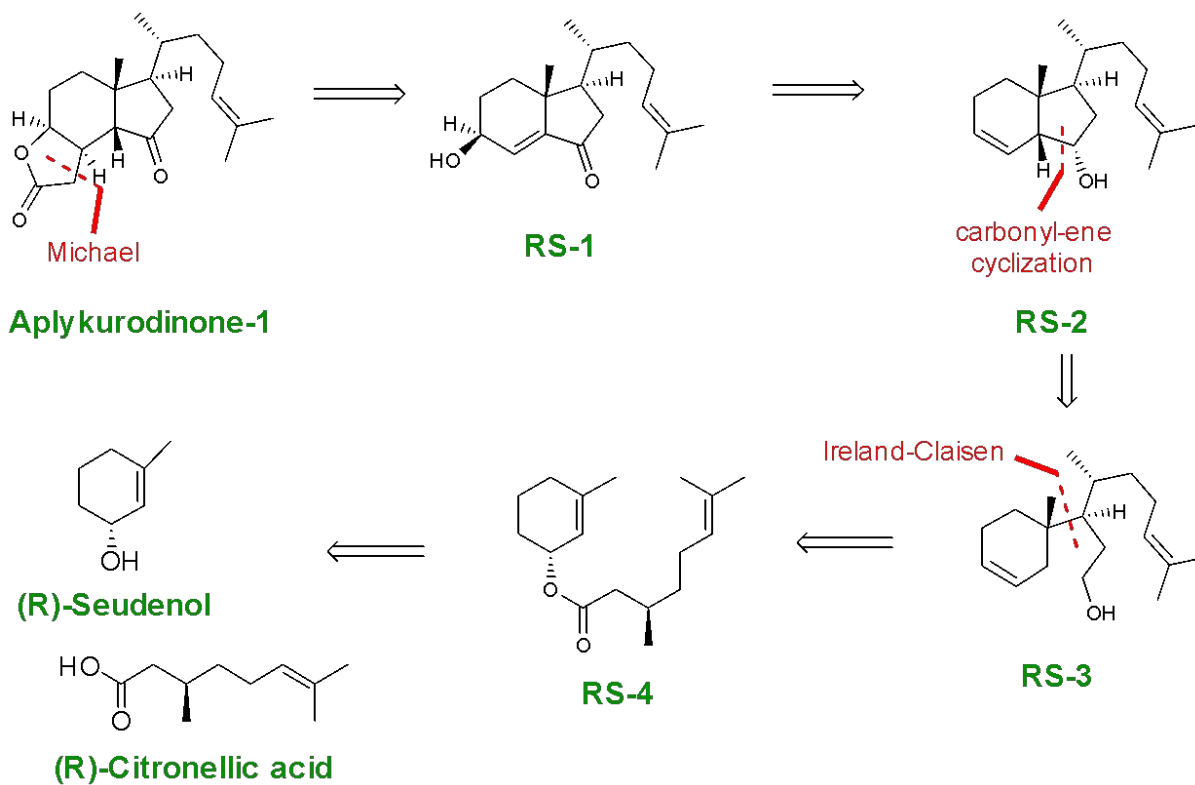
СИНТЕЗ (+)-APLYKURODINONE-1

Вера Дорохова
ВХК РАН, А-41

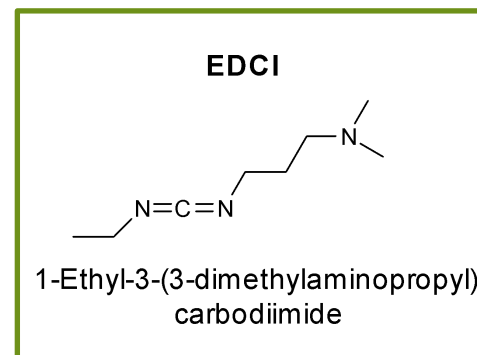
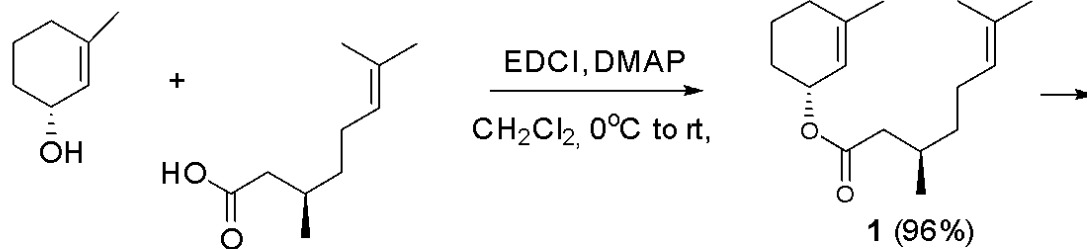
SIPHONOTA GEOGRAPHICA



РЕТРОСИНТЕТИЧЕСКИЙ АНАЛИЗ



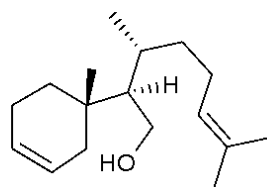
СИНТЕЗ



1) LDA, TBSCl
THF/HMPA,
-78°C to rt

2) toluene, 80°C, 20 h
3) DIBAL-H, -78°C, 1 h

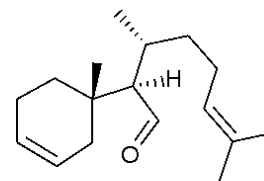
*enolization +
Ireland-Claisen +
reduction of the silyl ester*



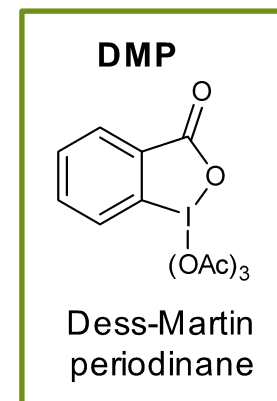
2 (60%, d.r. 11:1)

DMP
CH₂Cl₂, 0°C, 1 h

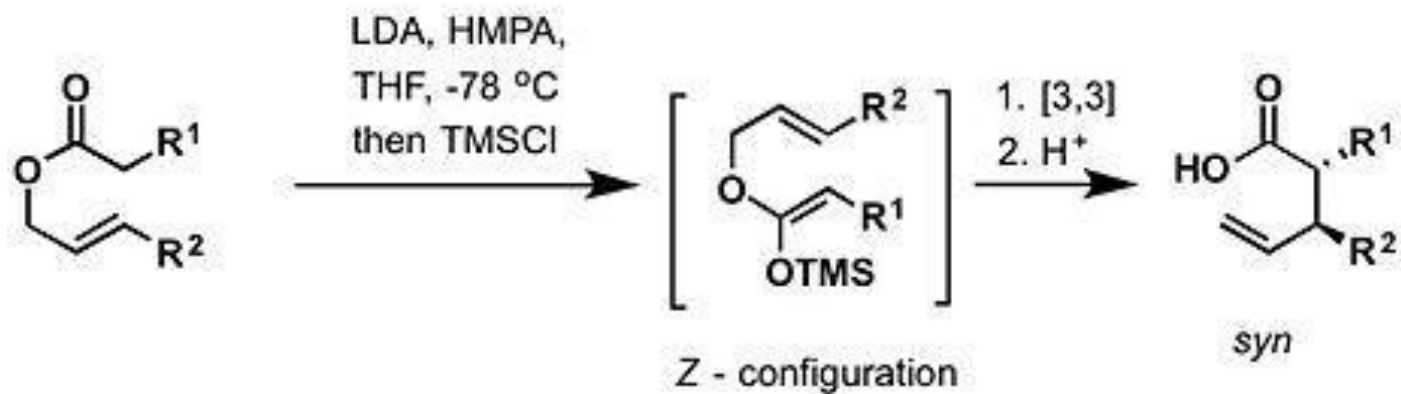
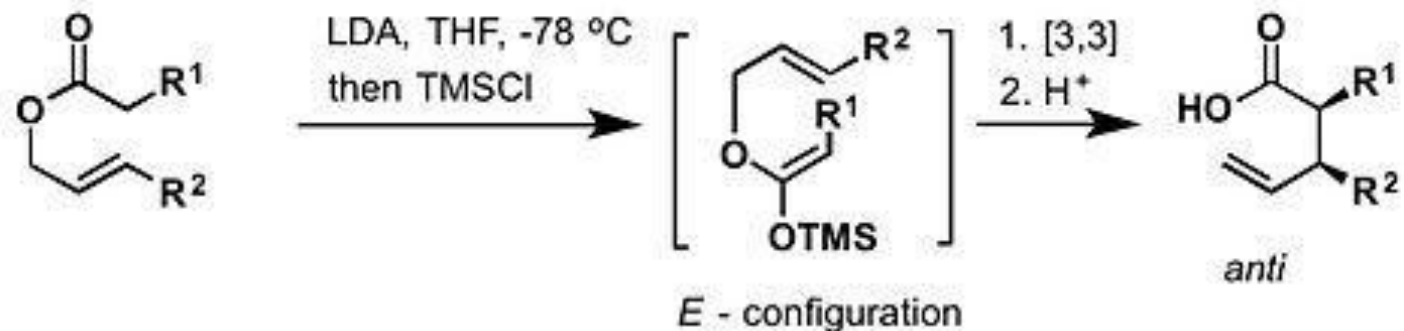
*Dess-Martin
oxidation*



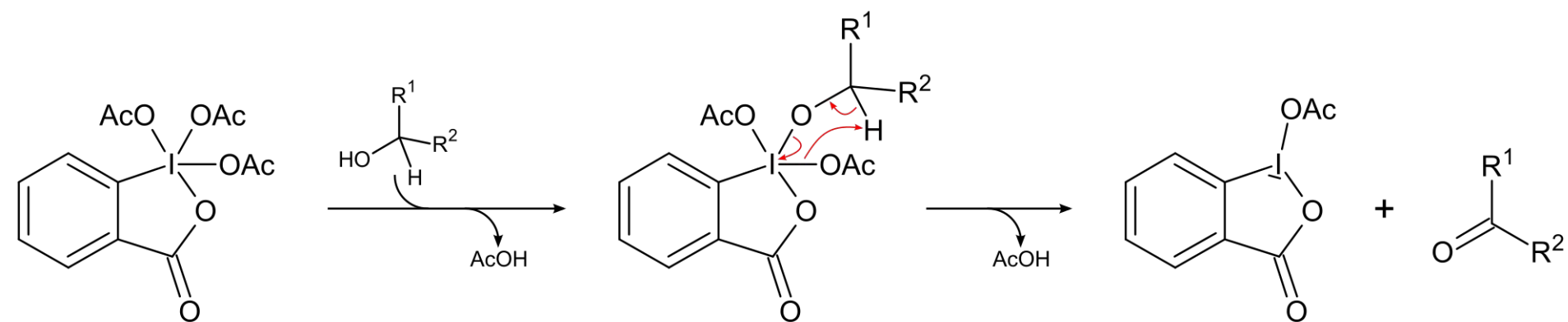
3 (95%)

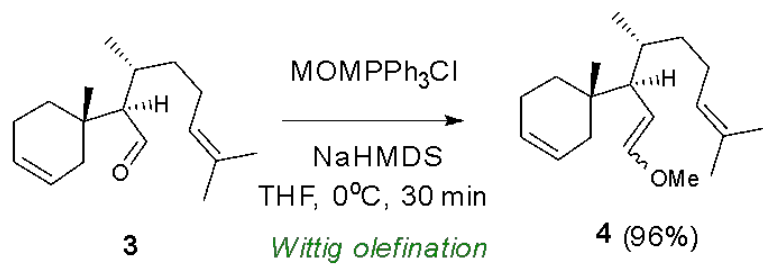


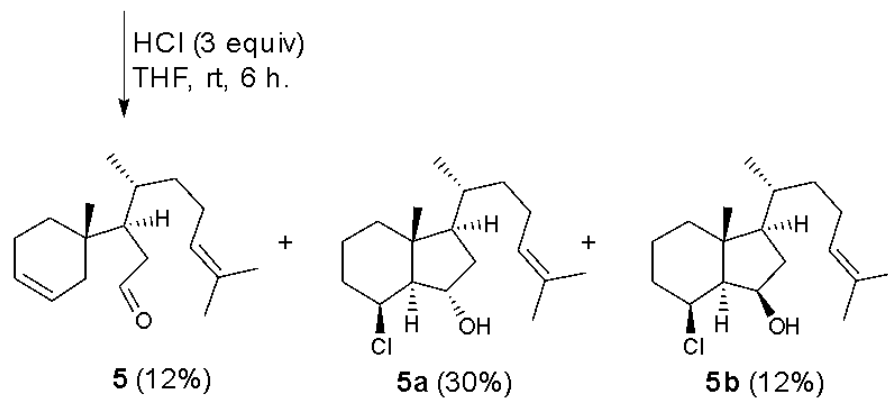
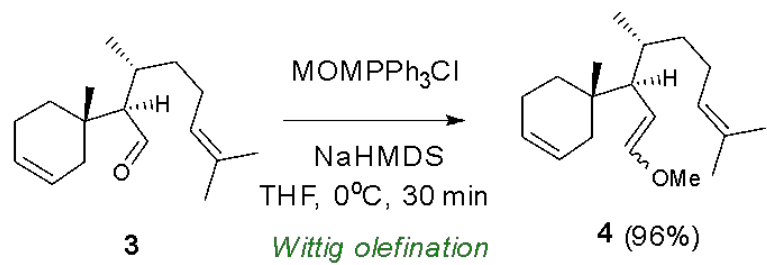
IRELAND-CLAISEN REARRANGEMENT

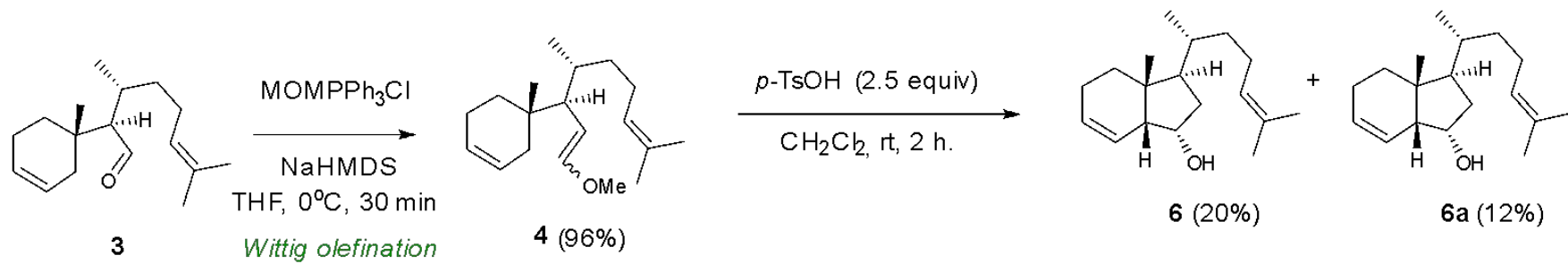


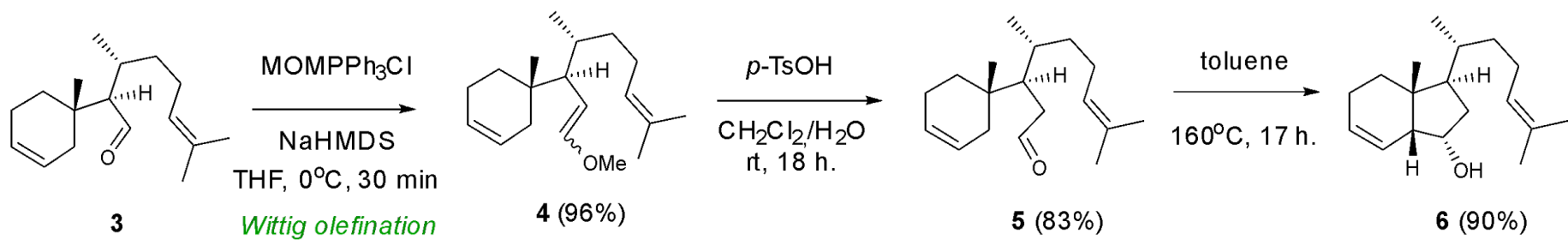
DESS-MARTIN OXIDATION

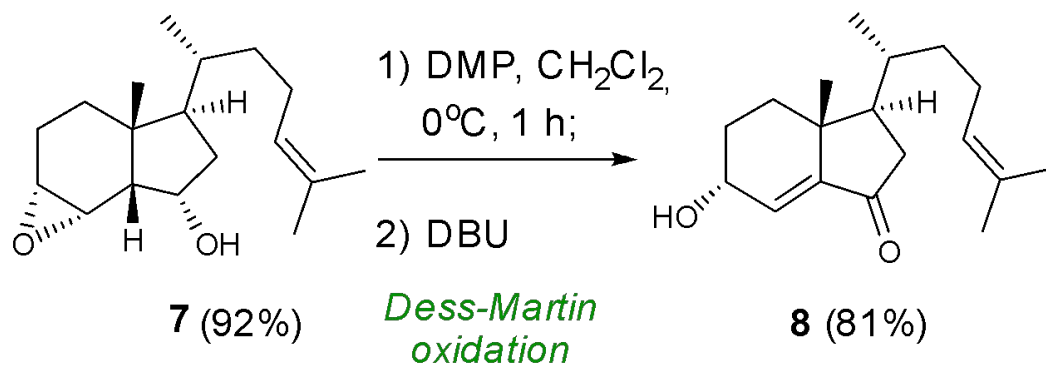
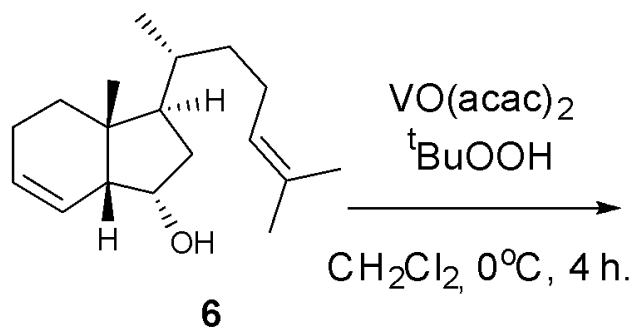


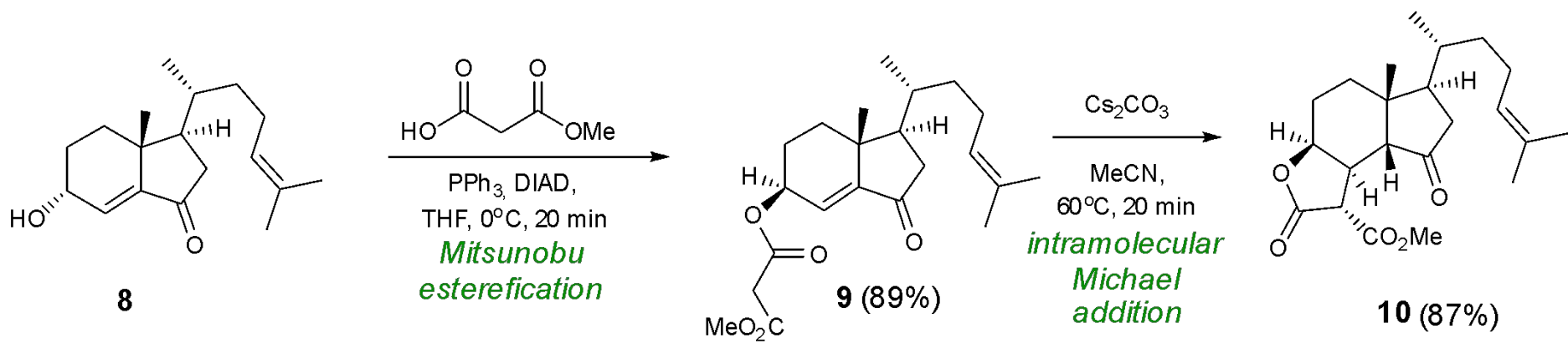




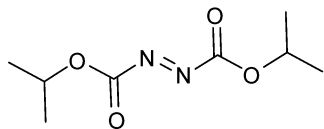






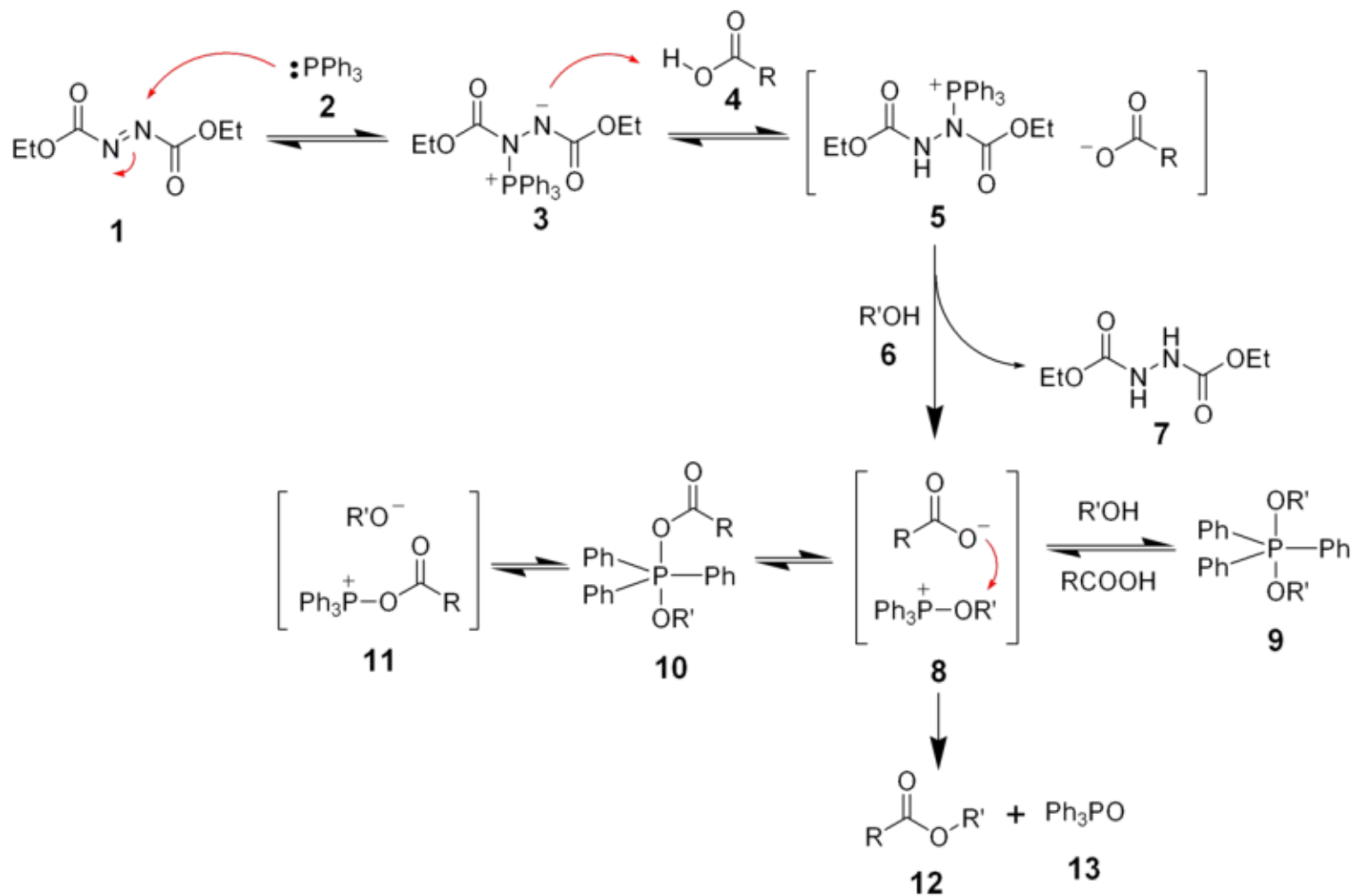


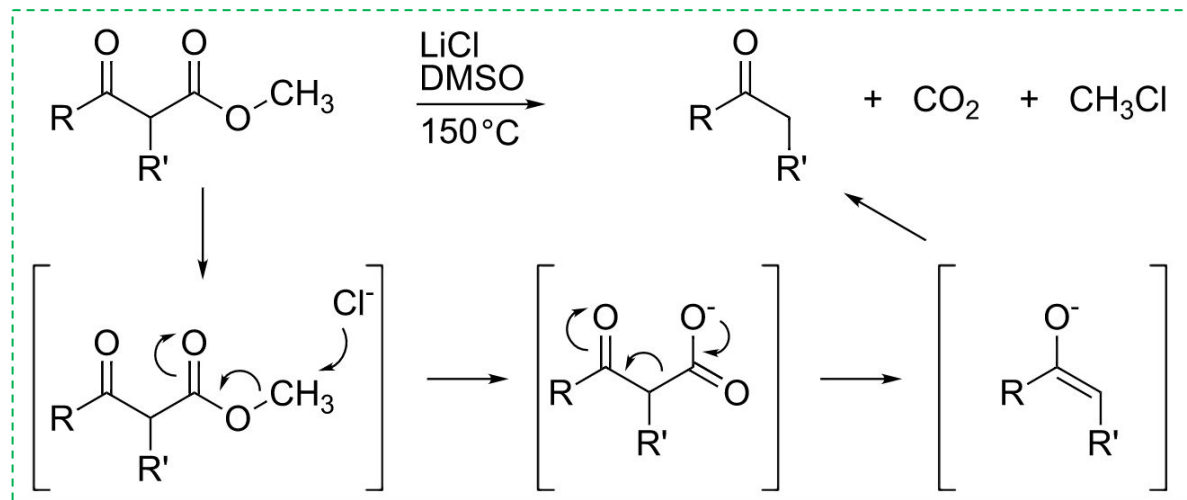
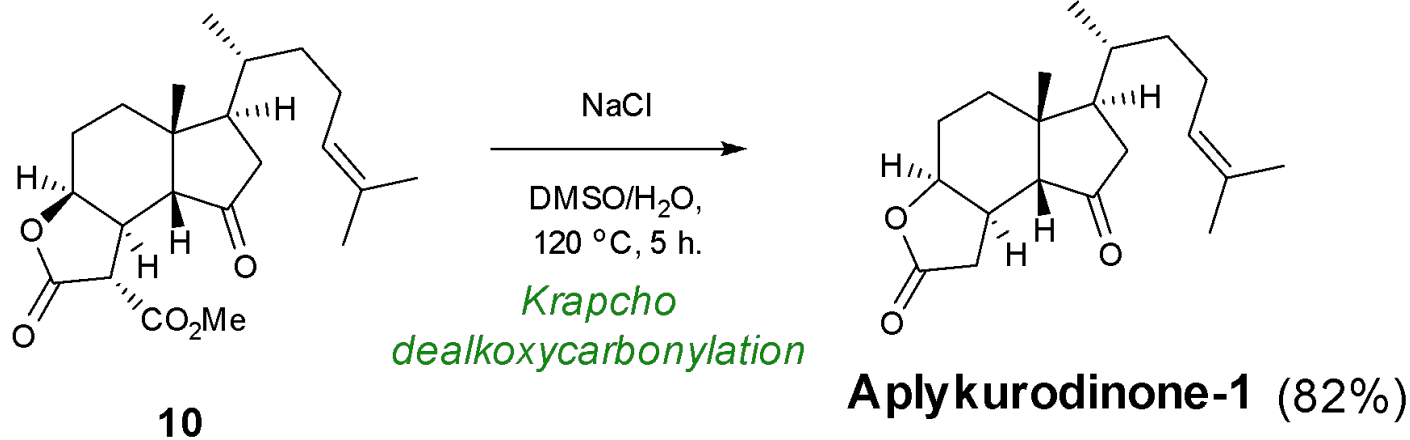
DIAD



Diisopropyl azodicarboxylate

MITSUMOBU ESTERIFICATION





- ✓ 11 steps
- ✓ 19% overall yield
- ✓ Full stereochemical control
- ✓ No protecting groups

СПАСИБО ЗА ВНИМАНИЕ!