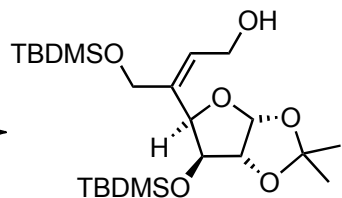
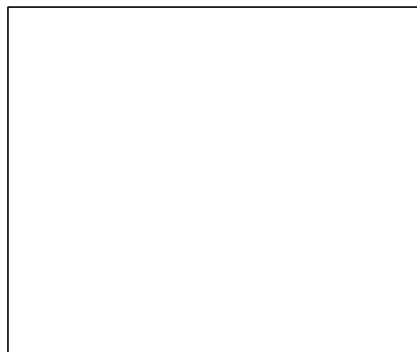


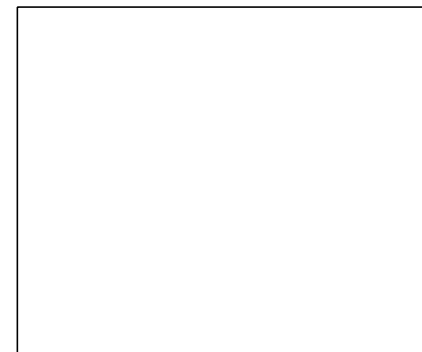
4 Stufen



1. MsCl, NEt₃, DCM
2. KSCN, MeCN



n-Heptan,
 μ-wave
 90°C, 3h



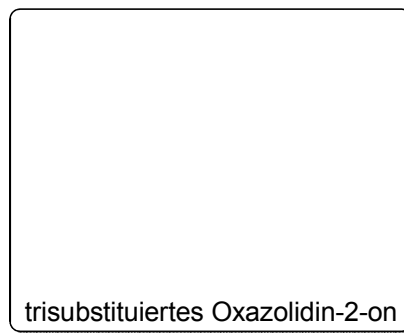
Diastereomengemisch

Problem 3

1. TBAF, THF
2. H₂O₂, NEt₃
3. Ac₂O, 4-DMAP, Pyridin

komplexe Aminosäuren
 (z.B. mit Sphingosin-Rest)

n Stufen

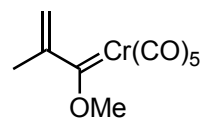
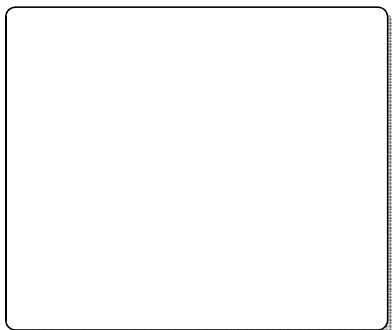


(Gemisch durch Kristallisation trennbar)

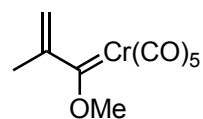
Problem 4



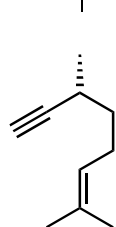
identische Regioselektivität



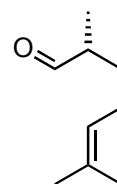
1. DCM, 55°C
2. AcBr, 4-DMAP, NEt₃, -20°C



1. DCM, 55°C
2. (NH₄)Ce(NO₃)₆, H₂O, 0°C

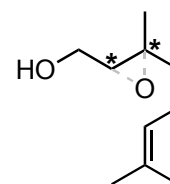


1.

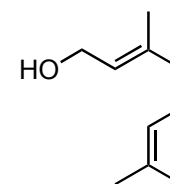


2.

2 Stufen



1.



* Keilstrichformeln
 bitte vervollständigen!