

Chemistry 531 Carbonyl Addition Diastereoselectivity - Practice Problems

For each of the following, circle the expected mode of the reaction (Felkin-Anh or Cram Chelate), draw the reactive conformation, and draw the major product using the template provided.

- Felkin-Anh
 Cram Chelate
- Felkin-Anh
Cram Chelate
- Felkin-Anh
 Cram Chelate
- Li does not chelate here.*

Felkin-Anh
 Cram Chelate
- Felkin-Anh
Cram Chelate
- Felkin-Anh
 Cram Chelate
- Felkin-Anh
Cram Chelate
- No Chelation*

Felkin-Anh
 Cram Chelate
- HMPA is a chelation additive
↳ disrupts chelation*

Felkin-Anh
 Cram Chelate