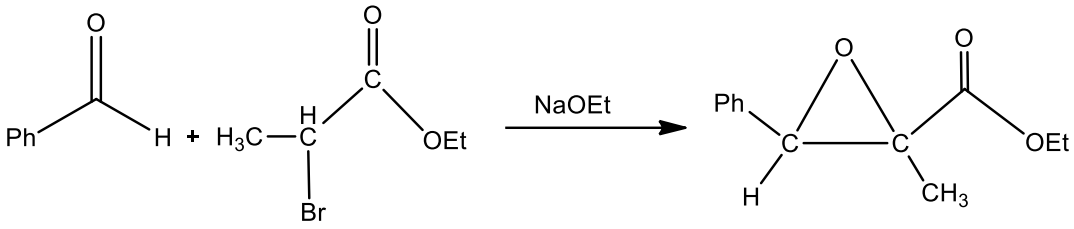
Study Notes On Darzen Reaction

Darzen Reaction

In the darzen reaction the condensation of a carbonyl compound with an α-haloester takes place in presence of base which results in the formation of an α-β epoxy ester.

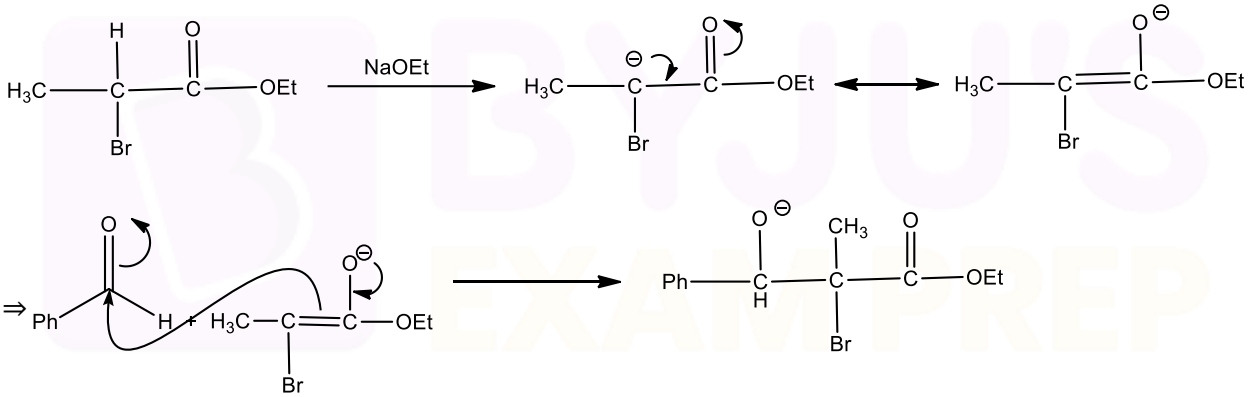
General Reaction-



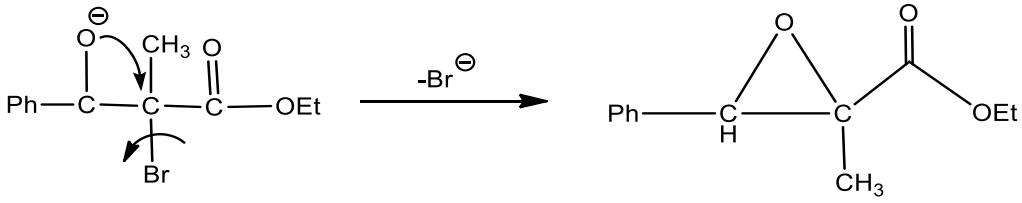
Reaction Mechanism-

Step-1: This step involves the formation of enolate of α-halo ester followed by the attack at the electrophilic carbonyl carbon.

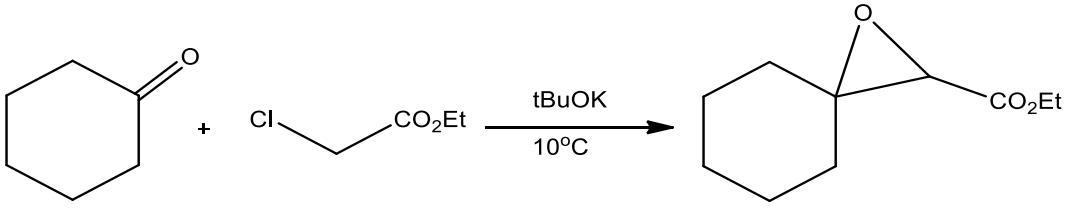
⇒



Step-2: It involves the elimination of halide ion by the intramolecular attack of alkoxide ion by S_N2 mechanism, which results in the formation of α-β epoxy ester.



Stereochemistry: The attacking alkoxide group and leaving group must be anti-to each other.



BYJU'S EXAM PREP

CSIR NET Chemical Science 2022

A Foundation Course

Complete Prep of Chemical Science for June 2022 Aspirants

Why take this course?

- 450+ Hrs Live Classes & Doubt Sessions for complete conceptual clarity
- 3000+ Practice Questions covering all levels of difficulty
- 20+ Unit Wise Study Modules & Mind Maps
- 50+ Full Mock Tests, Chapter Wise Mock Tests, PYQs Mock Tests