

Enol and Enolate Chemistry

March 4, 2020

- Racemization pathways for chiral aldehydes and ketones
- The HVZ reaction.
- Lithium enolates and their alkylation.
 - That useful pKa trick for predicting acid-base equilibria.
- Acetoacetic and Malonic ester synthesis

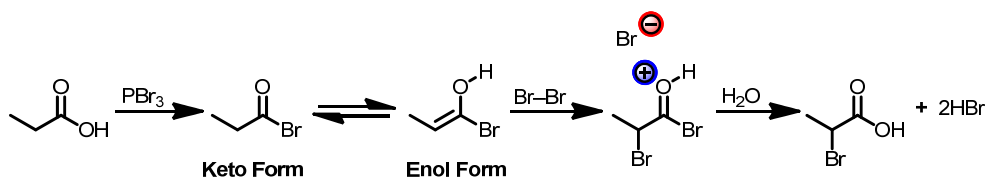
110b Teaching Fellows: Felipe Becerril, Christina Beck, Isabelle Cheng, Junha Gu, Nathalie Hong, Shy Lavasani, Allison Liu, Casey Morrison, Jerusalem Nerayo, Eric Tang, Baili Zhong, Martín Acosta Parra.

O'Leary office hours: T/Th 9:30-10:00 am, SN 208.

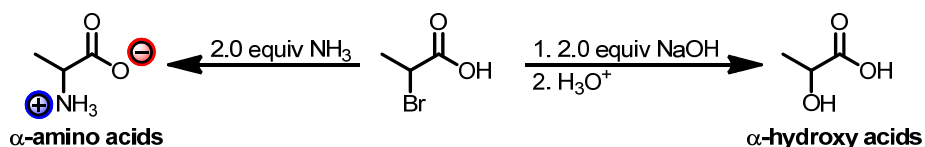
O'Leary's evening review session: Wednesdays 7:00 PM, SN Aud. **Course website:** <http://pages.pomona.edu/~djo04747/110/>

Suggested Problems for Exam 3. 10E/11E Chapter 18 problems: 15, 16, 20, 21, 26, 27, 29, 30, 32, 34.

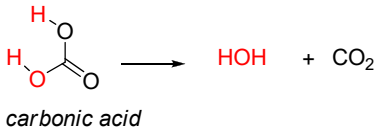
Hell-Volhard-Zelinsky (HVZ) Reaction

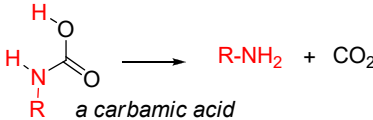


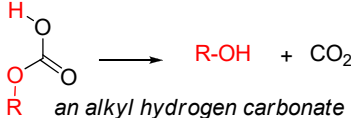
The **Hell-Volhard-Zelinsky reaction** effects the synthesis of α -halogenated carboxylic acids. These are useful synthetic intermediates that easily lead to α -amino and α -hydroxy acids through nucleophilic displacement.

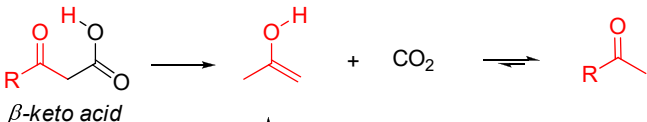


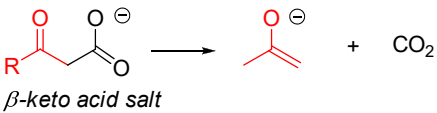
Famous Decarboxylation Reactions


carbonic acid


a carbamic acid


an alkyl hydrogen carbonate


 β -keto acid


 β -keto acid salt

