

Writing Assignment - Write the discussion section on the mechanism of acetylsalicylic acid synthesis

⇒ Due next Monday

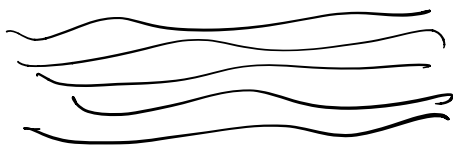
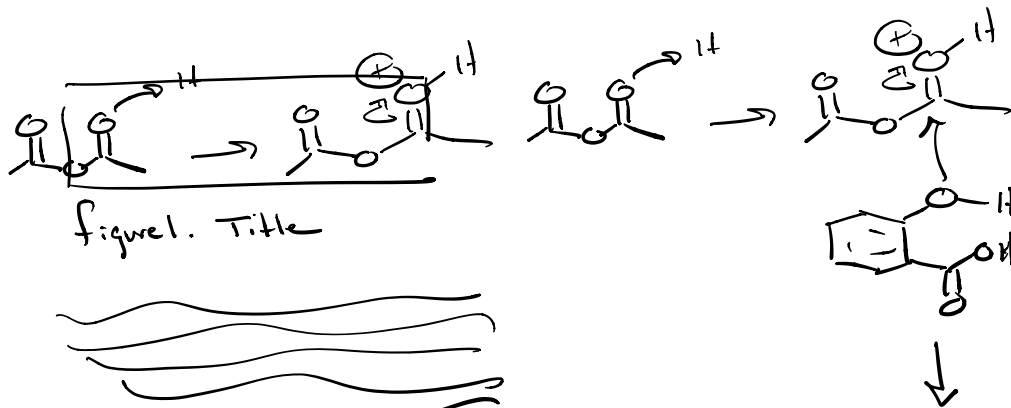
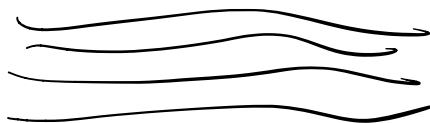


Figure 2. Title



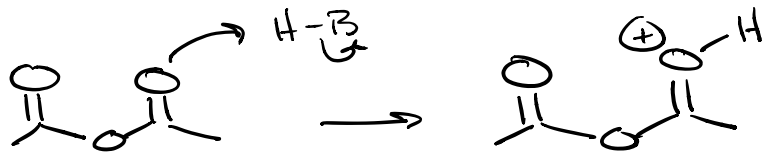


Figure 1. Protonation of acetic anhydride

The synthesis of acetylsalicylic acid is acid catalyzed.

The reaction starts with the protonation of acetic anhydride. The carbonyl oxygen takes a proton from phosphoric acid, resulting in a oxonium ion — a carbonyl with a positive charge. The oxonium ion increases the partial positive charge on the carbonyl carbon through resonance.

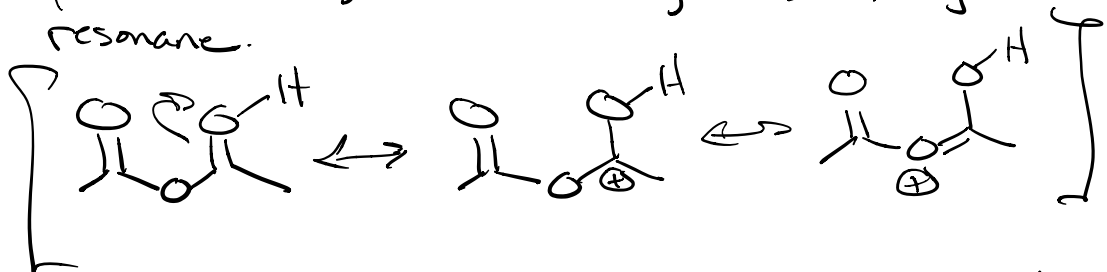


Figure 2. Resonance of protonated acetic anhydride