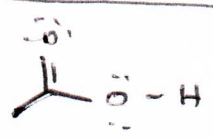


4/13/12



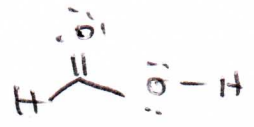
Less likely than protonation of a carbonyl since there is no resonance stabilization possible,



acetic acid (common)

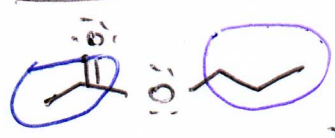
ethanoic acid

standard ending for carboxylic acids



formic acid

(methanoic acid)



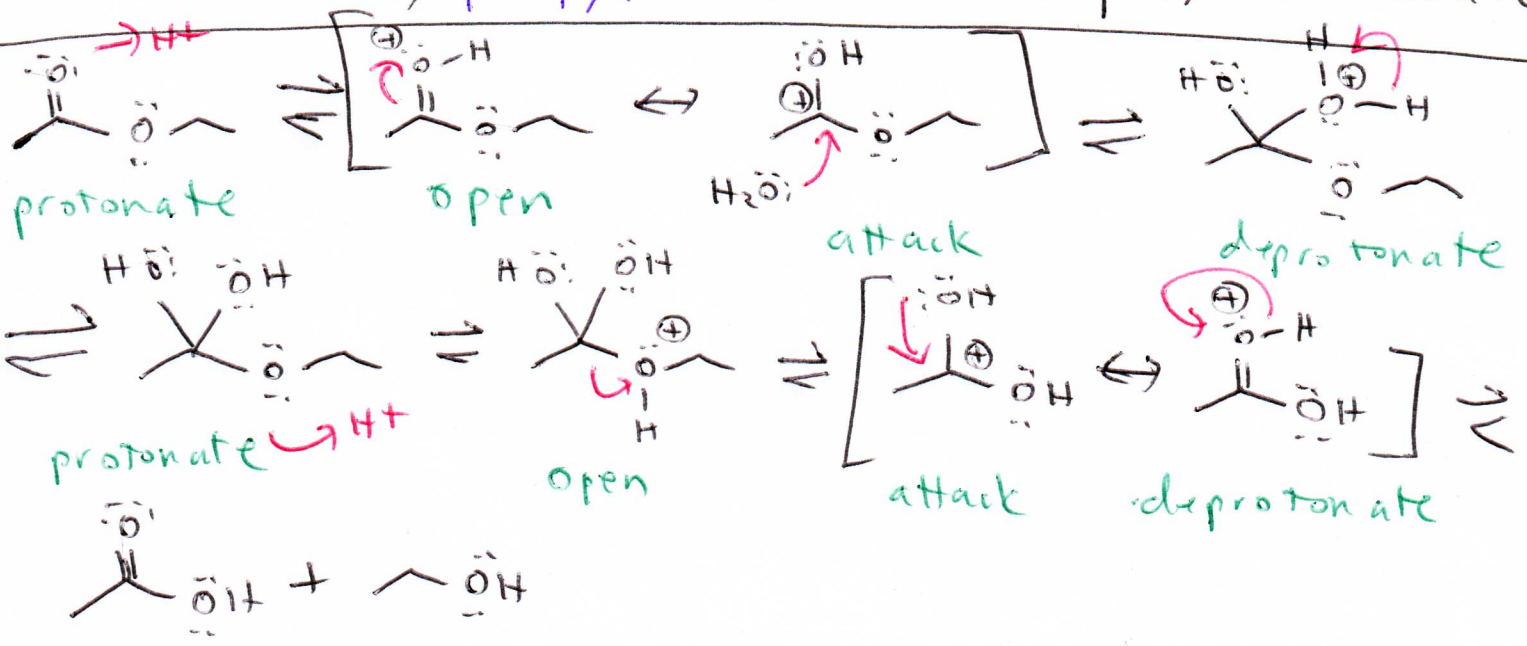
ic \rightarrow ate

carboxylic \rightarrow carboxylate

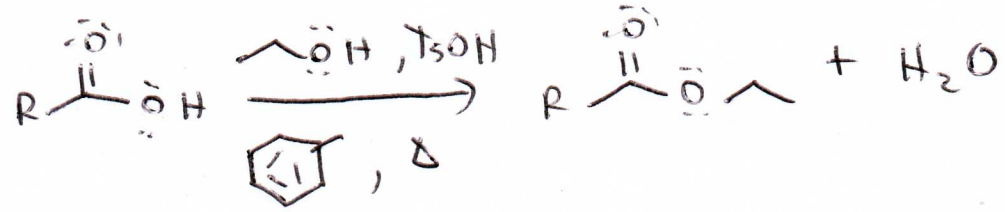
Propyl

acetate

or propyl ethanoate

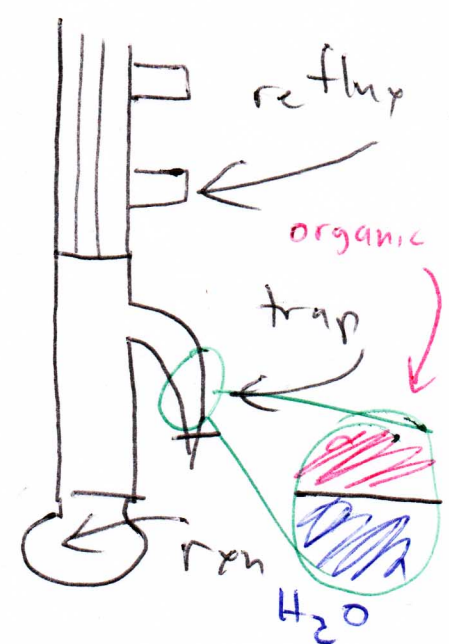


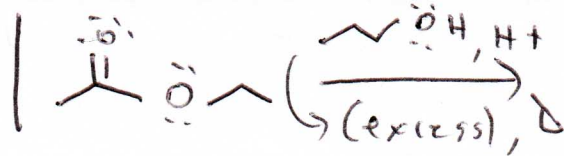
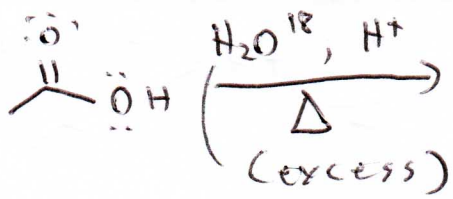
Esterification



Water + toluene form an azeotrope, which is a vapor mixture of two or more compounds that in the liquid phase, are immiscible. Toluene is often added to refluxes such as this to help the removal of water.

Pearl-Strark Trap





Saponification \rightarrow Formation of carboxylate salts



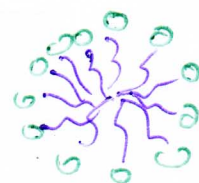
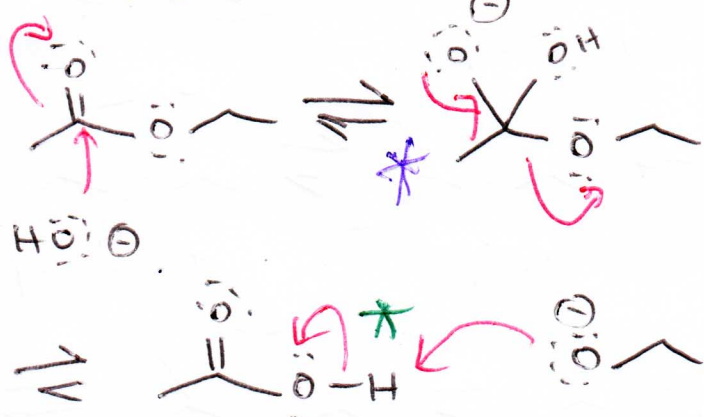
organic tail

ionic head group

hydrophobic / lipophilic

hydrophilic / lipophobic

CMC - critical micelle concentration



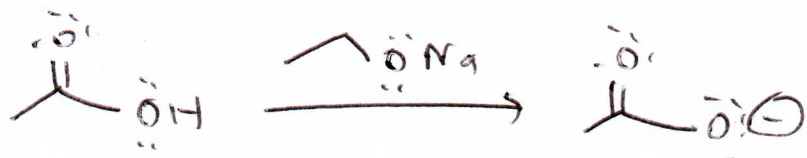
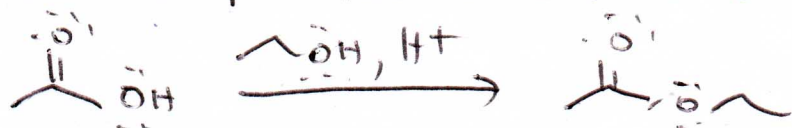
pK_a

H-OH	15.7
H-OCH ₂ CH ₃	16
H-OCH ₂ CH ₂ CH ₃	18



* The initial portion of this saponification is technically reversible since the base used and the intermediate formed are similar enough to each other in terms of basicity.

* At the end of the mechanism, both an acid and a base are produced, which instantly react w/ each other + prevent the rxn from being reversible.



Esterification not possible due to neutralization

Diazomethane

13

