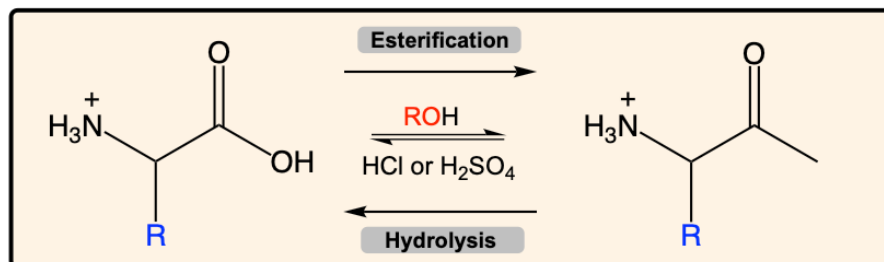


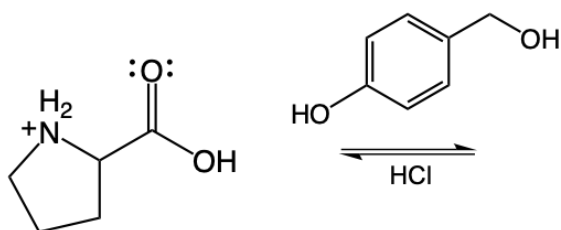
### CONCEPT: REACTIONS OF AMINO ACIDS: ESTERIFICATION

- **Recall: Fischer Esterification** is an acid-catalyzed esterification of \_\_\_\_\_ acid.
- Carboxylic acid group of \_\_\_\_\_ acids can also undergo Fischer Esterification.



□ Same nucleophilic acyl substitution mechanism as detailed in Carboxylic Acid Derivatives chapter.

**EXAMPLE:** Provide a mechanism for esterification of proline with 4-hydroxybenzyl alcohol.



**PRACTICE:** Provide a mechanism for acid-catalyzed hydrolysis of valine propyl ester.

