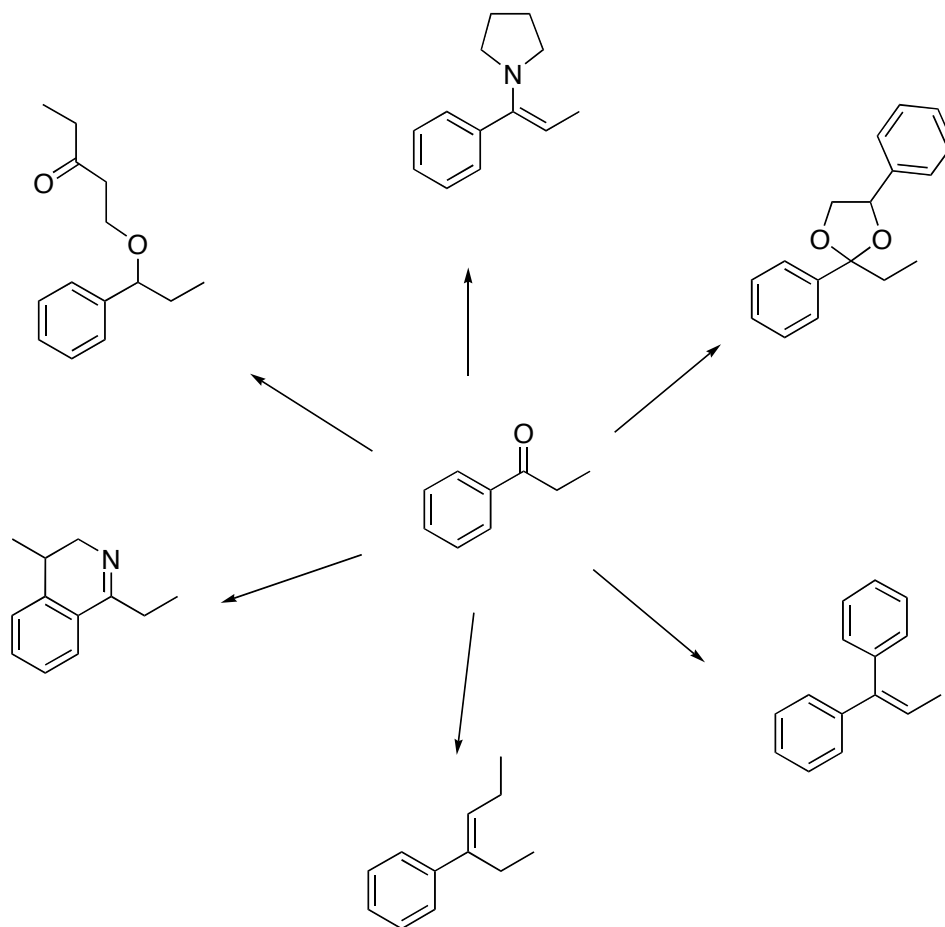


WORKSHOP 4

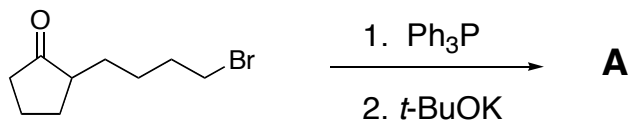
FEBRUARY 12

1. Show how to carry out the specified chemical conversions using any necessary organic and inorganic reagents. More than one step may be required.

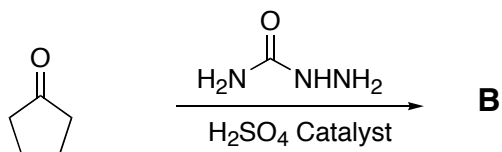


2. Give structure for compounds A-H and provide a mechanism for the following transformations:

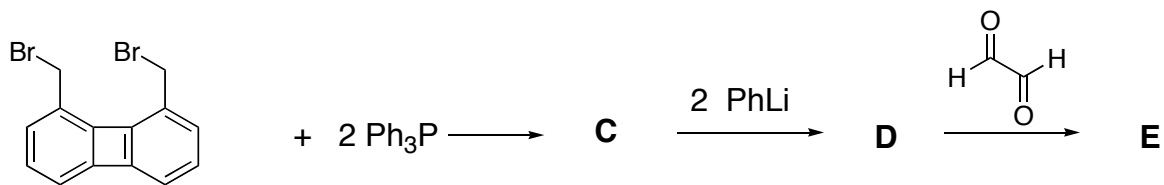
a.



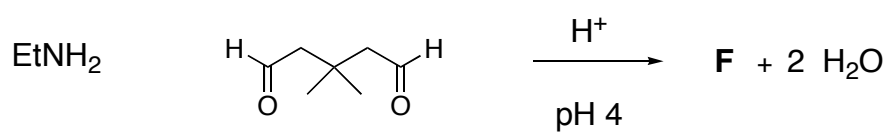
b.



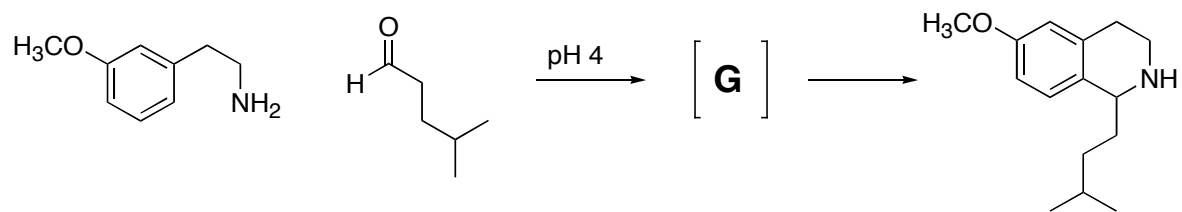
c.



d.

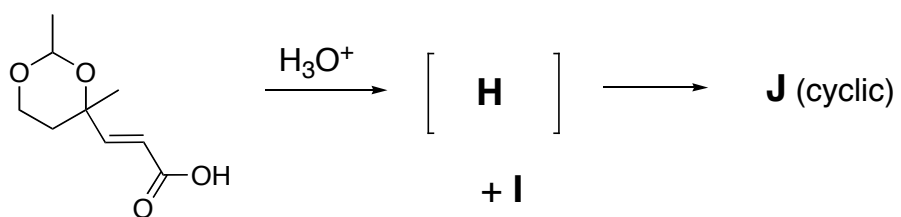


e.



THE PICTET-SPENGLER REACTION.
(NOTE: **G** IS A CHARGED INTERMEDIATE)

f.



3. Propose a mechanism to account for this transformation.

