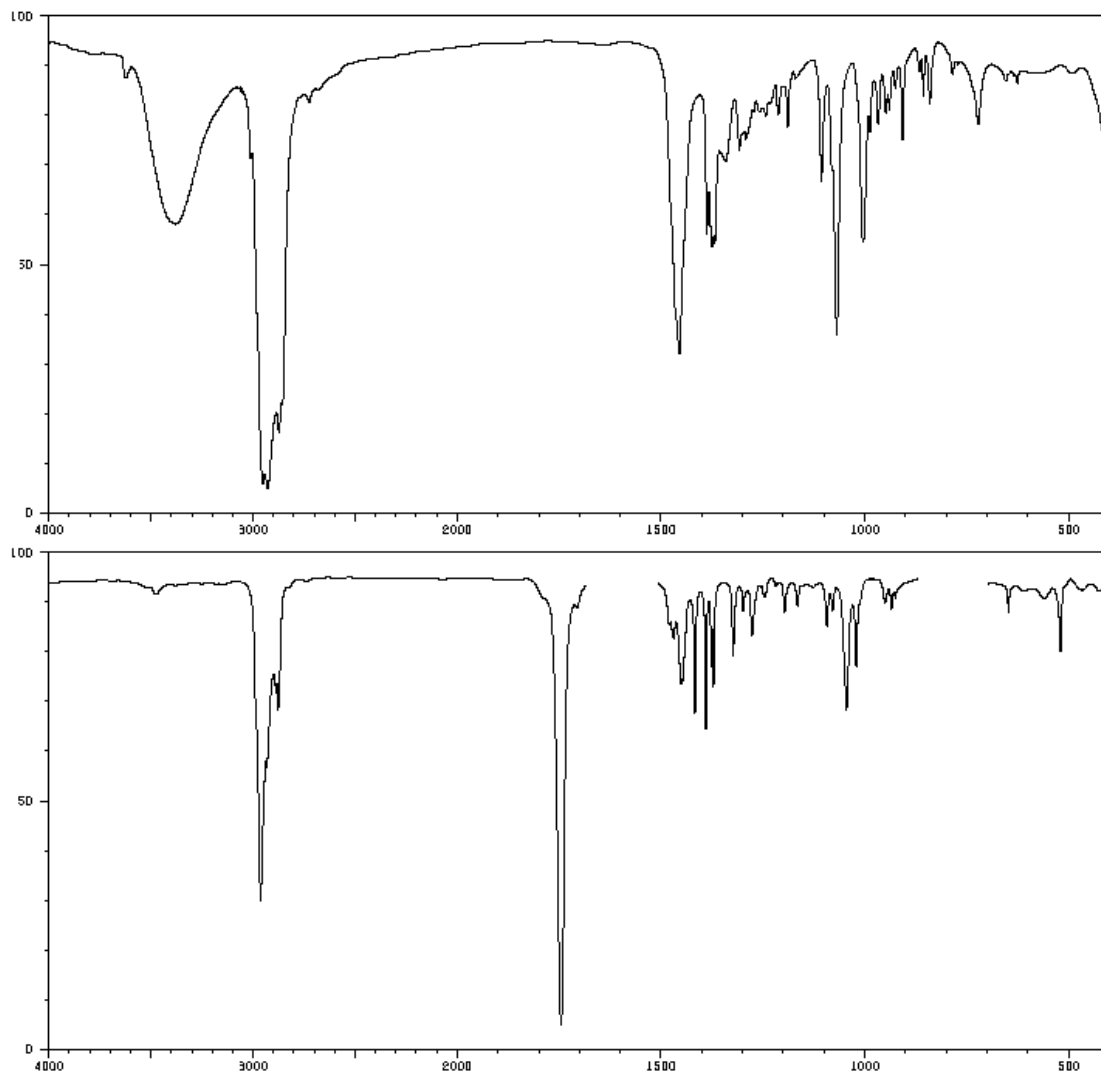


Experiment 13

Oxidation of Alcohols: Oxidation of Borneol to Camphor

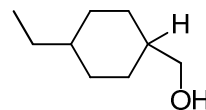
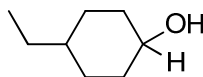
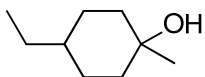
Study Questions

- 1) The IR spectra of borneol and camphor are shown below (taken from SDBS). Identify which spectrum belongs to which compound and assign the bands to rationalize your choice.



Answer: The top one is borneol, because it has a strong, broad OH peak. The bottom one is camphor because it has a sharp C=O peak.

- 2) Each of the compounds below is treated with hypochlorous acid (HOCl). For each compound, give the structure of the product of the reaction or, if no reaction occurs, write “No Reaction.” Assume that conditions are chosen so that no carboxylic acid is formed at any point.



Answer:

Experiment 13: Oxidation of Alcohols

