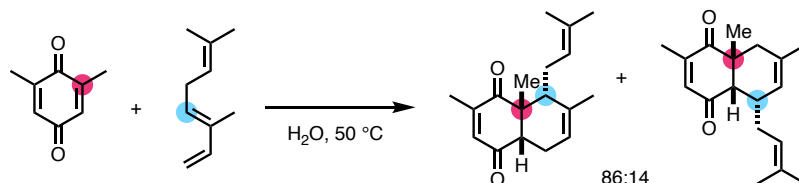
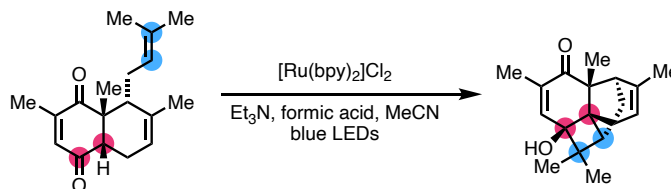


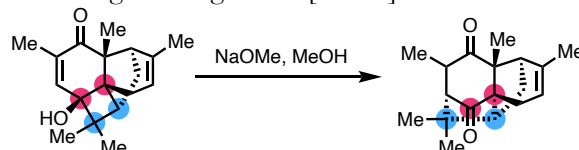
1. Explain the regioselectivity of the following Diels-Alder reaction. [★★]



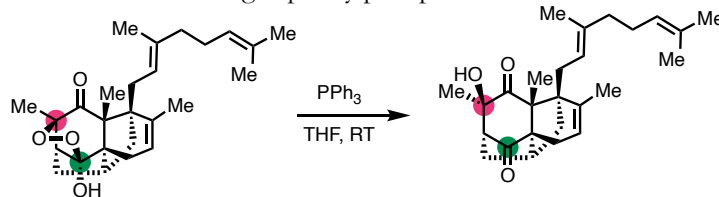
2. Hypothesize the mechanism of the following reaction. [★★]



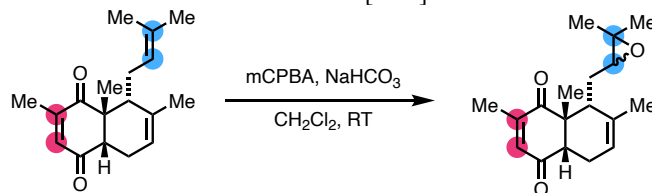
3. Propose a mechanism for the following rearrangement. [★★★]



4. Hypothesize the mechanism of the following triphenylphosphine-mediated reduction. [★★]



5. Rationalize the following chemoselective transformation. [★★]



6. Detail the mechanism of the following transformation. [★★]

