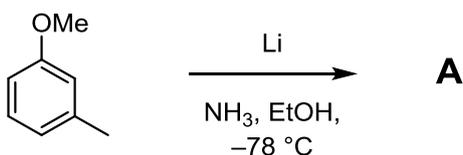


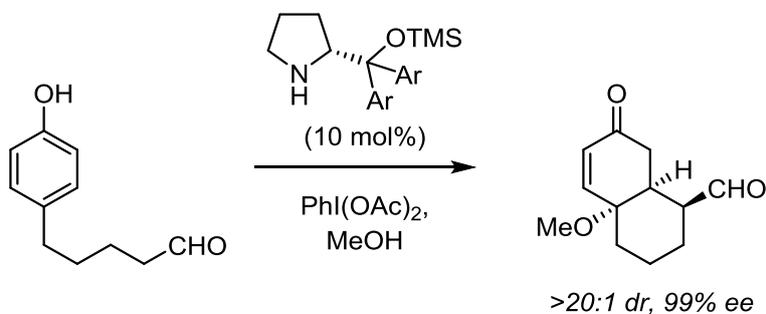
## EAA group problems: Dearomatization

4<sup>th</sup> of June 2019

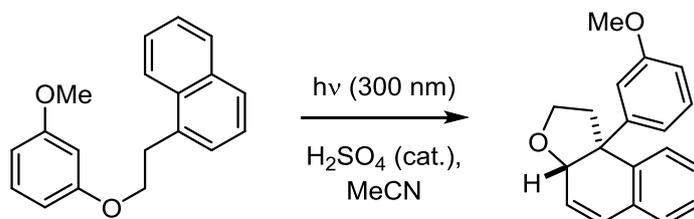
1. This famous reaction was developed in the Dyson Perrins laboratory in 1944. What is its name? Please provide a mechanism and the structure of product **A**, accounting for any regioselectivity.



2. Provide a plausible mechanism for the below transformation. You do not need to explain the stereoselectivity.



3. Suggest a mechanism for the below transformation.



4. Many transition metal carbonyls are known to form stable  $\eta^6$ -complexes with arenes. With this in mind, provide intermediates for the below reaction sequence (mechanism not needed), and suggest a structure for intermediate **B**. Propose a plausible mechanism for the final transformation.

