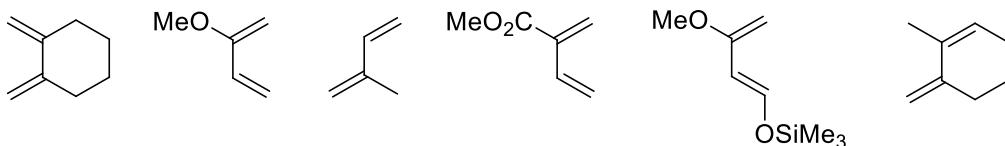
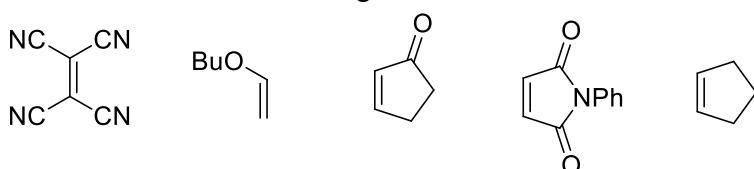


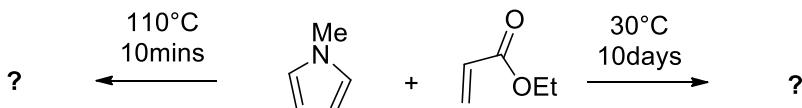
1. a) Order the following dienes according to their reactivity in Diels-Alder cycloadditions. Begin with the **best and most reactive** one.



b) Order the following olefins according to their potential to act as dienophile in Diels-Alder reactions. Begin with the **most reactive** one.



2. What products do you expect when *N*-methyl pyrrole and ethyl acrylate are submitted to the outlined reaction conditions? Provide a justification?



3. Next level in complexity: The displayed natural product Asatone is a **dimer** produced by **one single** Diels-Alder reaction. A) Draw the corresponding monomer and B) highlight the approach for the Diels-Alder.

