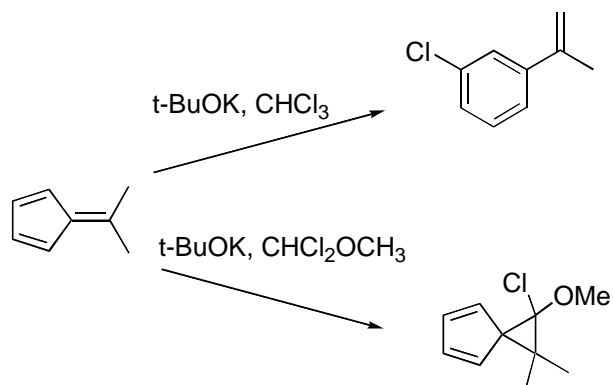


1. Shown below are two reactions. Provide a reasonable mechanism for each, and also provide a reasonable explanation as to why the two reactions do not proceed by the same mechanism.



2. The reaction below is part of a recently-reported synthesis of a fragment of the organic framework of cobyric acid, a naturally-occurring coordination complex of cobalt. Provide a reasonable mechanism for the transformation.

