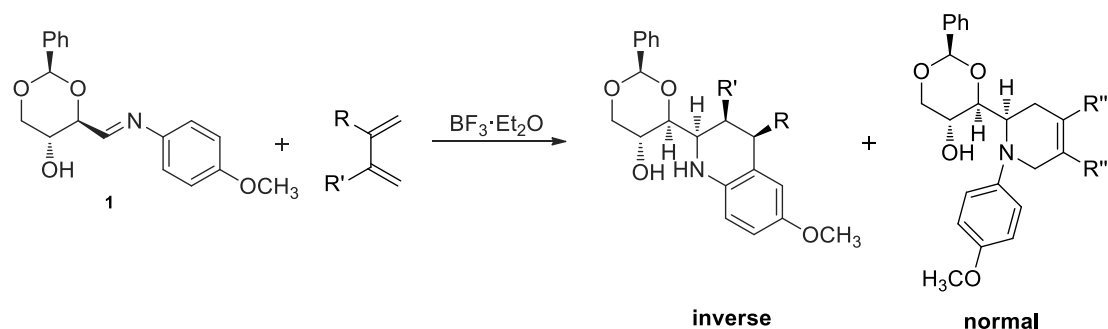


[4 π +2 π] Cycloaddition Between a D-Erythrose Imine and Different Nucleophilic Dienes

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Imino-Diels–Alder reaction has been known for many years, but only recently major advances have been made, specially through the development of catalytic asymmetric synthesis.¹ It has been proved however that under acid catalysis [4 π +2 π] processes are not concerted, but otherwise ionic,² Nevertheless the selectivity may be maintained, as occurred in the present work. Simple nucleophilic dienophiles react with D-erythrose *N*-arylimine **1** to give single products, due to the facial selectivity interaction of reagents. Nucleophilic dienes, such as the example shown in **Scheme 1** acted both as diene in a formal “inverse electron-demand” Diels-Alder reaction, and as “normal electron-demand” reaction. The results obtained will be discussed.



Scheme 1.

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