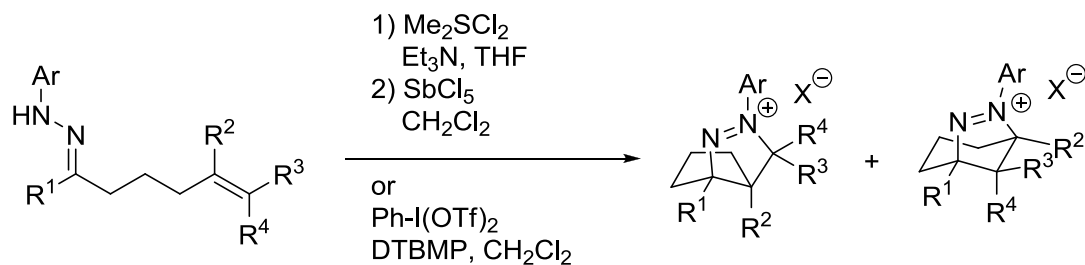


Synthetic Methods for Diazenium Slats



Bicyclic and tricyclic diazenium salts were prepared by the reaction of α -chloroazo derivatives with a Lewis acid through an intramolecular cycloaddition reaction. These diazenium salts were also prepared by an alternative and more direct route in which hydrazones were reacted with a hypervalent iodine reagent. Both methods provided a mixture of ring-fused and bridged diazenium salts in good yields and high stereoselectivity. The effect of the N-aryl substituent on the ratio of the fused and bridged diazenium salts was also studied and it was observed that the ratio can be controlled by changing the electronic properties of these substituents.