Total Synthesis of (±)-Indolizomycin

Significance: (±)-Indolizomycin has a unique structure containing a hemiaminal, where the bridgehead hydroxy group is flanked by a cyclopropane and an epoxide. Danishefsky and co-workers describe the first total synthesis of (±)-indolizomycin.

Comment: Annulation of diazo ketone D furnished indolizidine E. Subsequent McCluskey fragmentation and epoxidation set the stage for a Wharton fragmentation to furnish allylic alcohol I. Further elaboration gave (±)-indolizomycin.