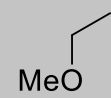




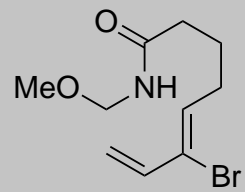
10 ep (Overall)  
8 ep (LLS)



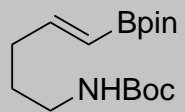
4



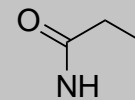
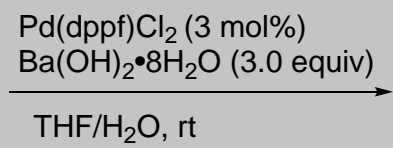




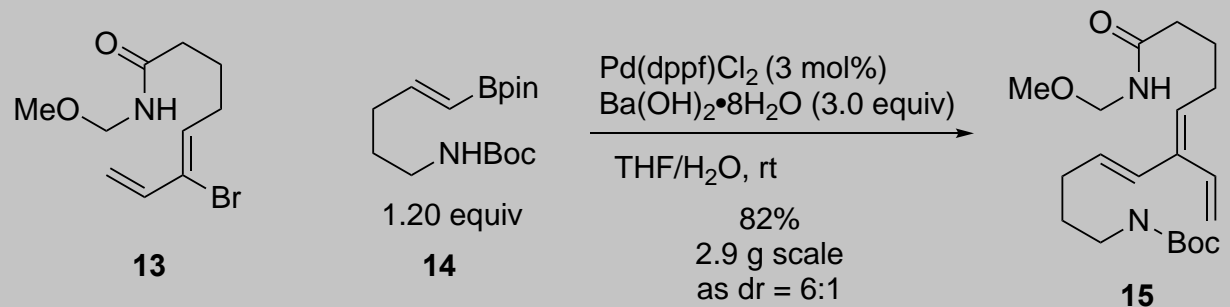
**13**



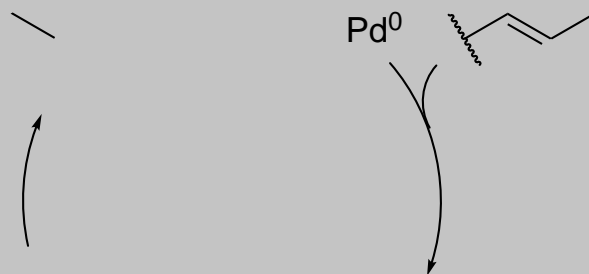
**14**



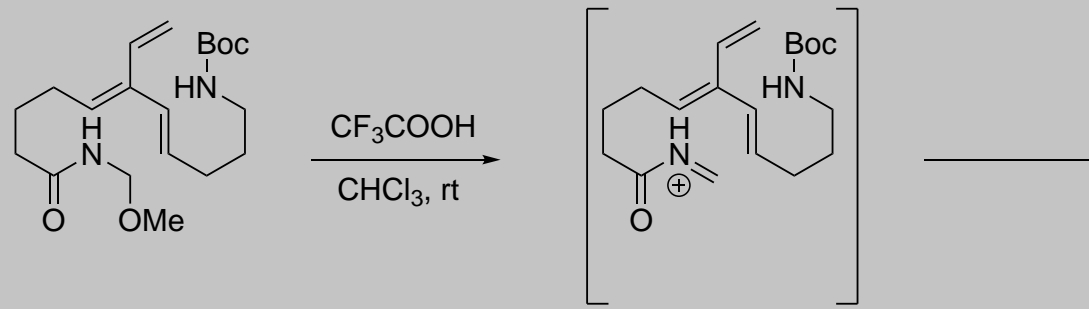


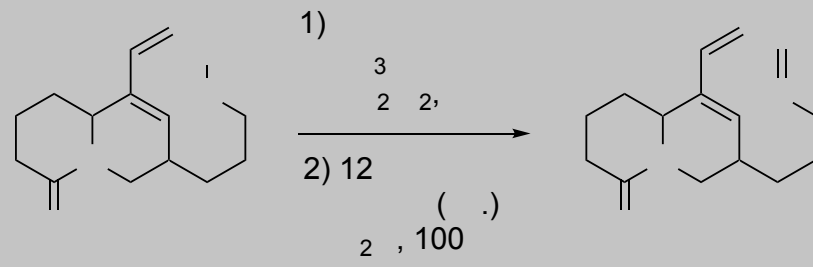


Stereoinvertive Suzuki coupling

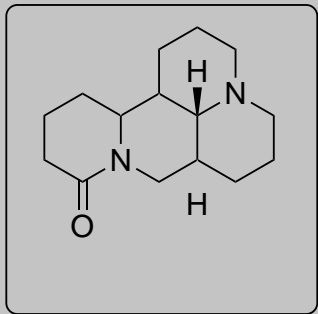


This process, which is a guided borrowing experience in related Negishi methodology, is well known. The **first example** of a stereoinvertive Suzuki-Miyaura cross-coupling





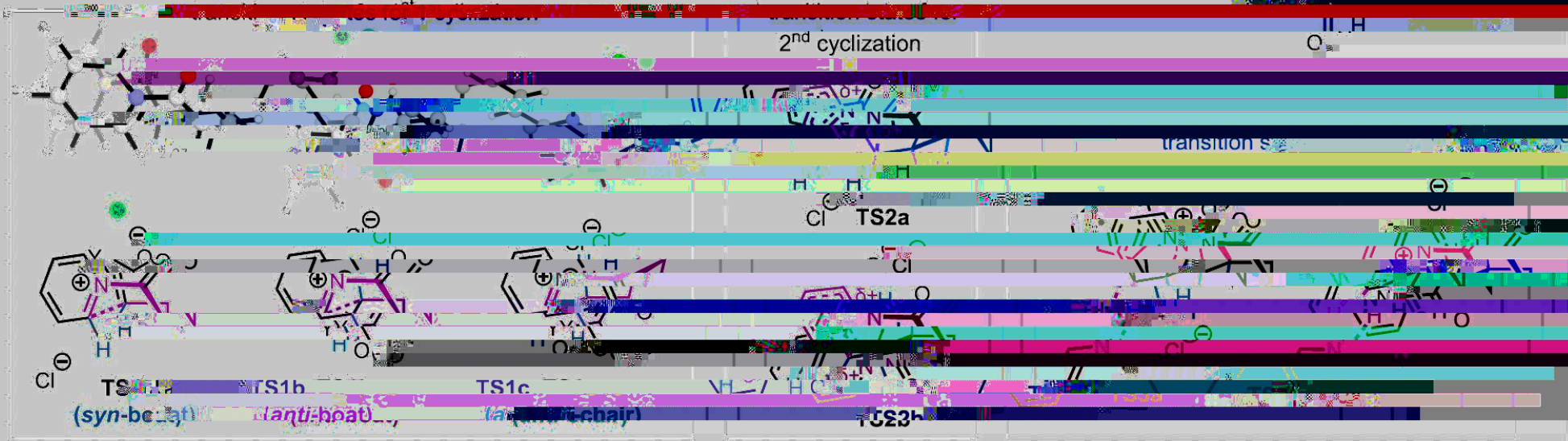
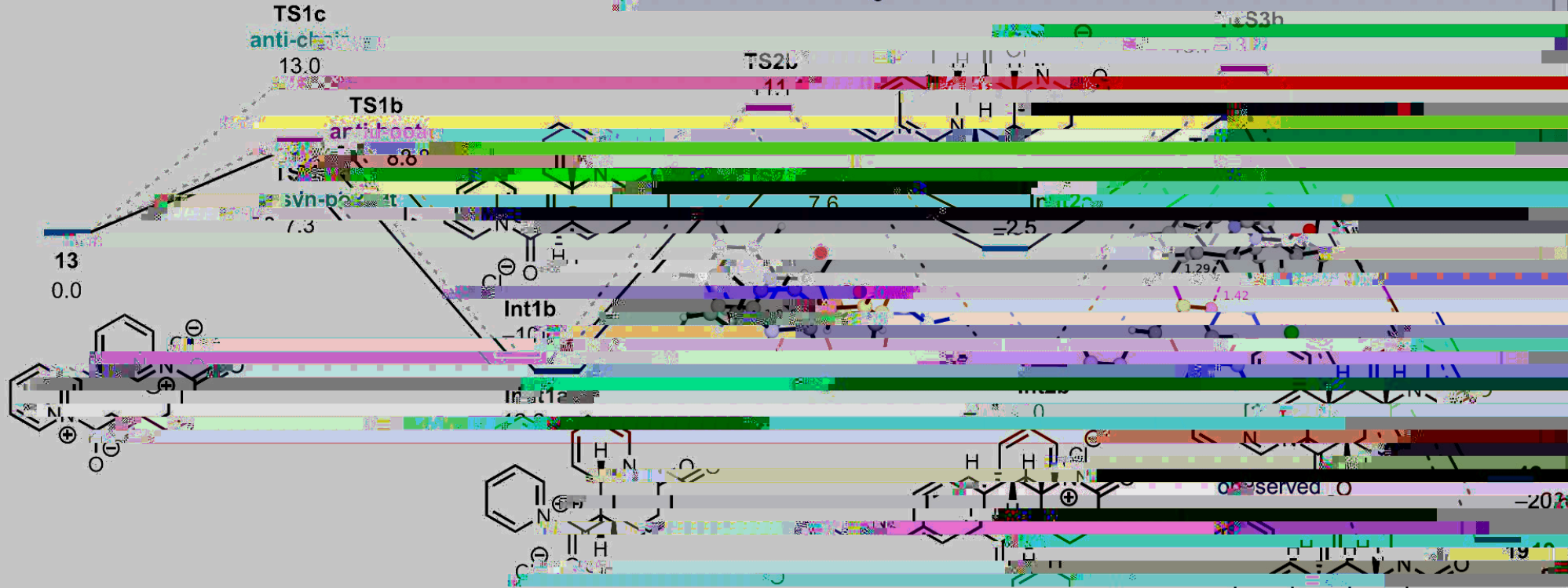


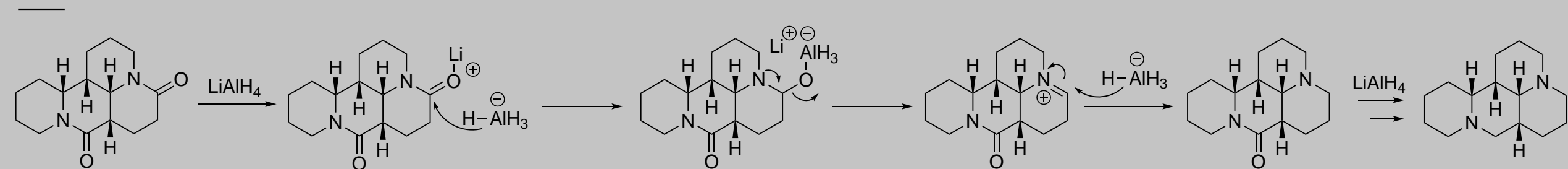
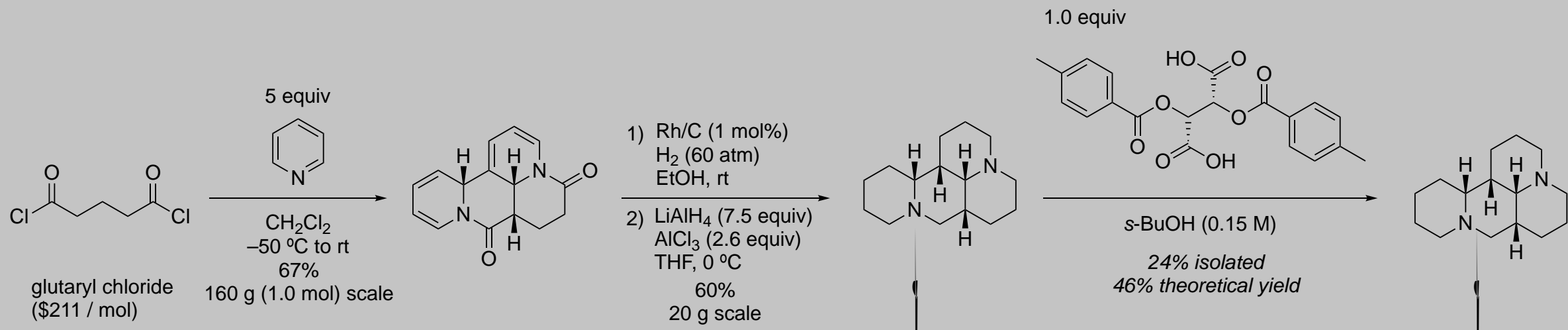


4 ep (Overall)!!

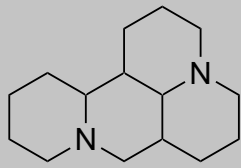


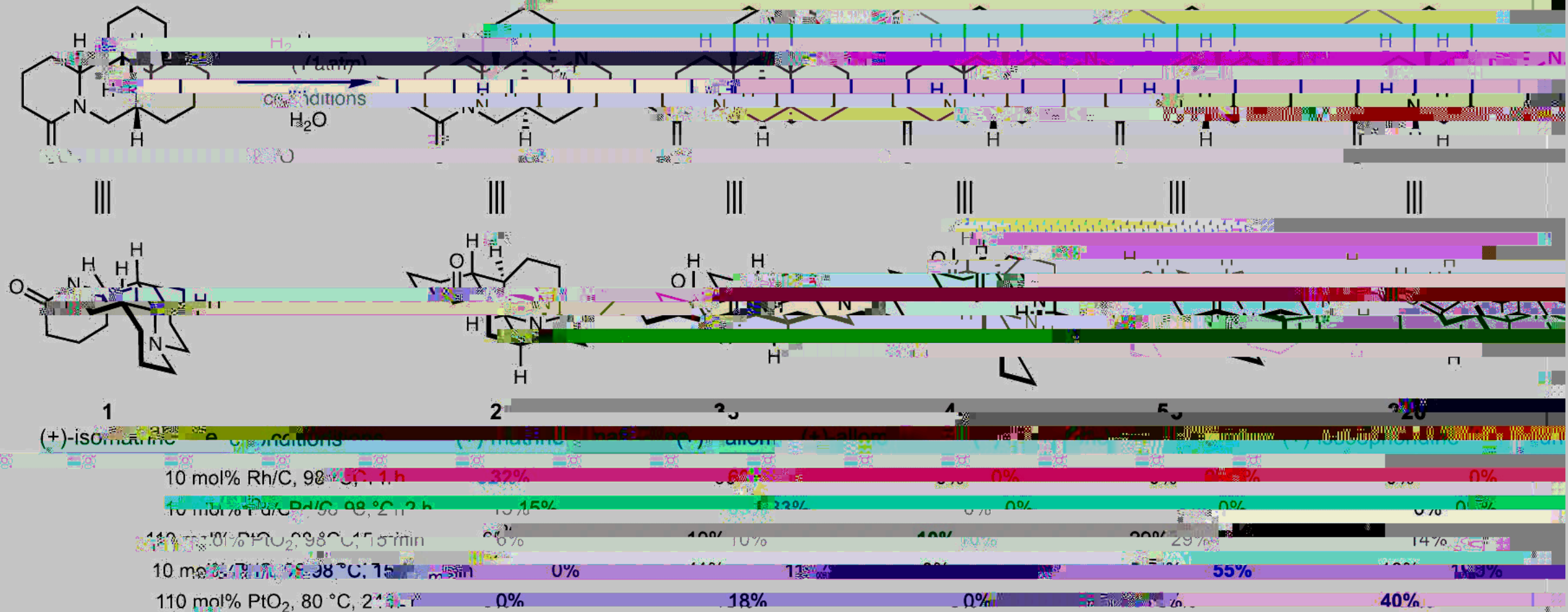
(D) Reaction coordinate diagram for the synthesis of ...











the first total synthesis of the l-pipecolin alkaloid (-)-ophoridine, and the first synthesis of (+)-isomarine, (+)-marine, (+)-allomarine, and (+)-