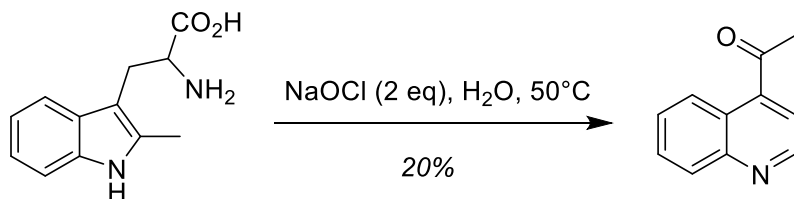


**GROUP SEMINAR : EXERCICE 6**

**25/06/15**

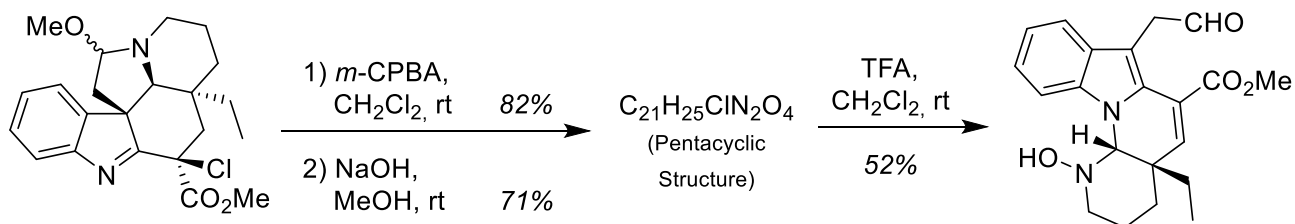
**For each examples, give a plausible mechanism pathway.**

**Exo1: Rearrangement of Tryptophane Skeleton**



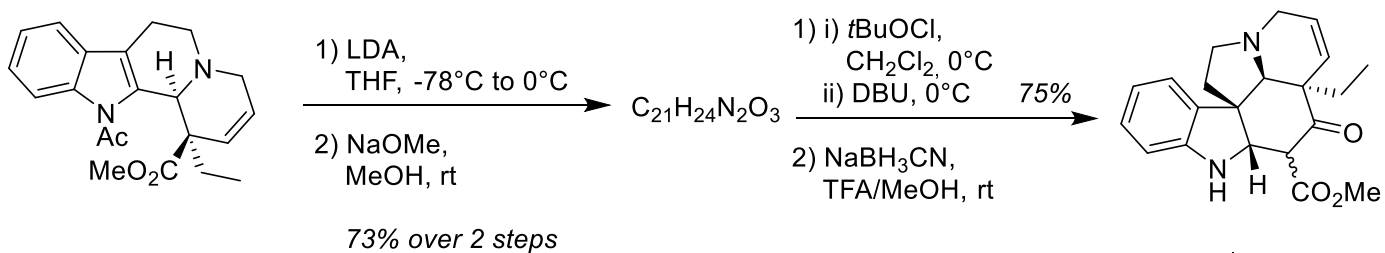
Tamelen, E. E.; Haarstad, V. B. *Tetrahedron Letters* **1961**, 2, 390-393

**Exo2: Rearrangement of Aspidosperma Alkaloid Skeleton :**

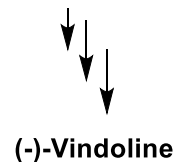


Lewin, G. *J. Org. Chem.* **1995**, 60, 3282-3287

**Exo3: Total Synthesis of (-)-Vindoline**

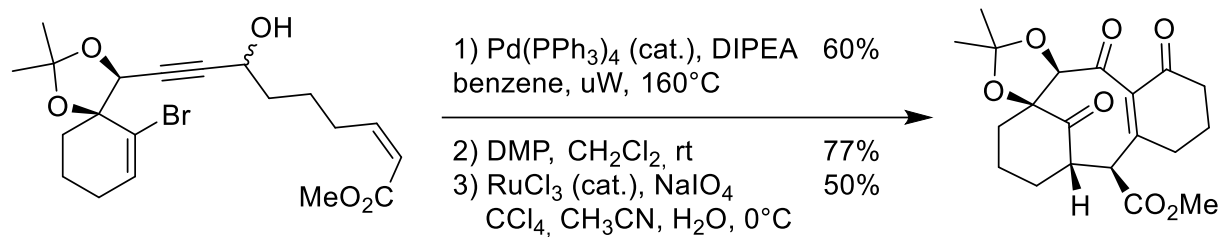


Rapoport, H. *J. Am. Chem. Soc.* **1987**, 109, 1603-1604



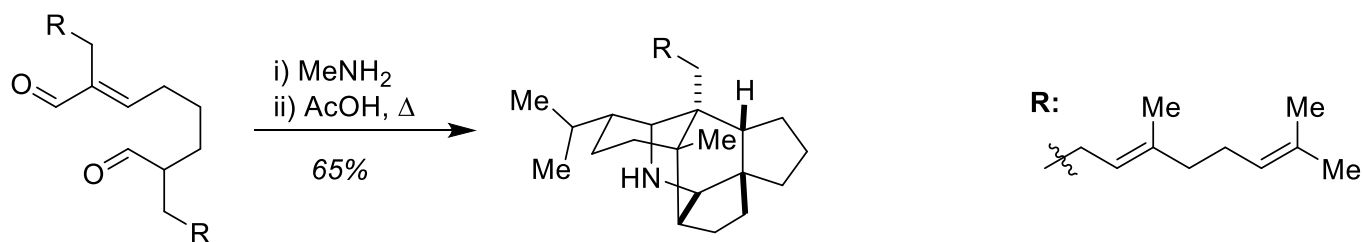
**(-)-Vindoline**

#### Exo4: Synthesis of Taxol Skeleton Type



Suffert, J. *Angew. Chem. Int. Ed.* **2011**, 50, 3285–3289

#### Exo5: Total Synthesis of Dihydro-*proto*-daphniphylline using Domino Reaction



Additional question : Give the product obtained if ammonia is used instead of methyl amine.

Heathcock, C. H. *J. Org. Chem.* **1992**, 57, 2544–2553

Heathcock, C. H. *J. Org. Chem.* **1992**, 57, 2554–2566