

# **CHEM – 647**

## **Organic synthesis**



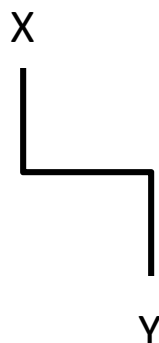
**Dr. Humaira Yasmeen Gondal**

Department of Chemistry

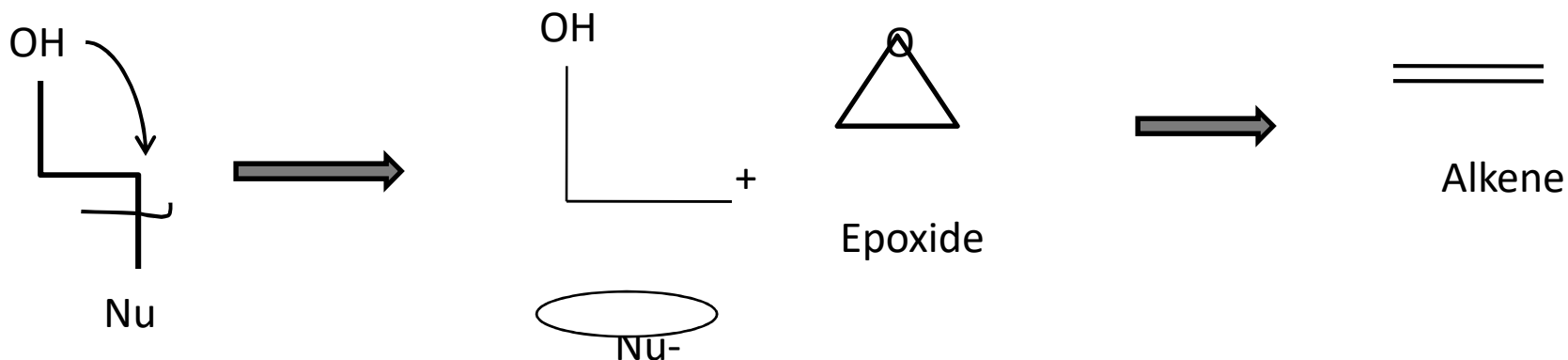
University of Sargodha



## 1,2-difunctionalised compounds



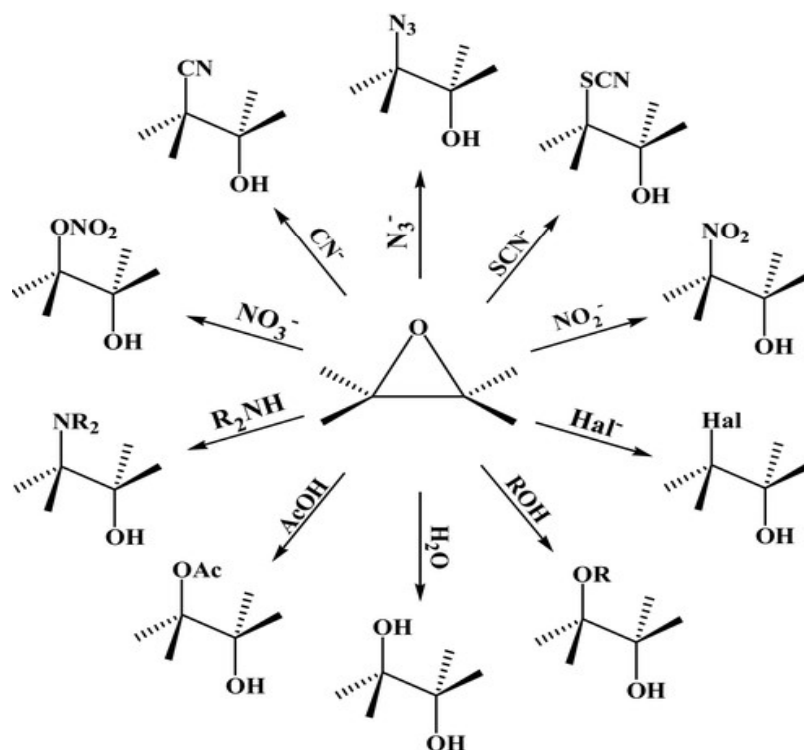
**X= OH or its derivatives (X, ethers, esters etc)**  
**Y= Any heteroatom or based Nucleophile**  
**like OR, NR, SR. RMgX, RLi etc**





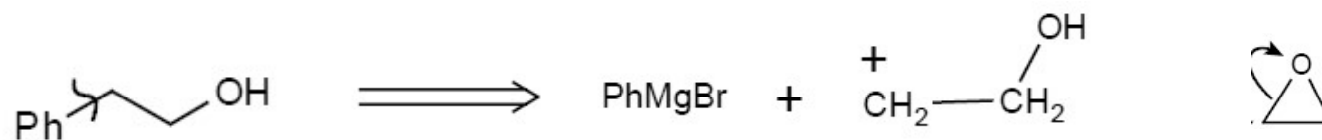
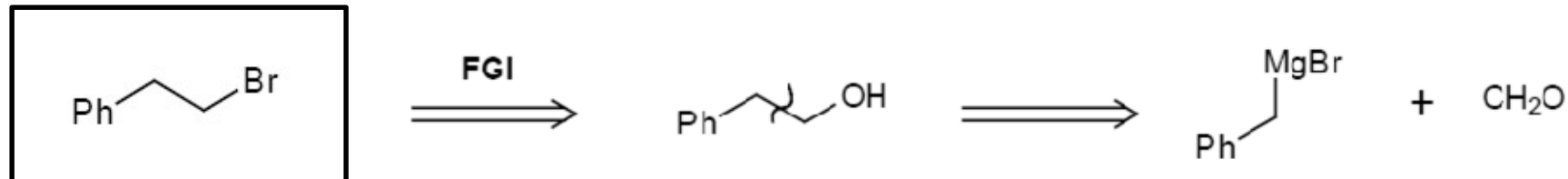
## 1,2-difunctionalised compounds

### Nucleophilic ring-opening of epoxides

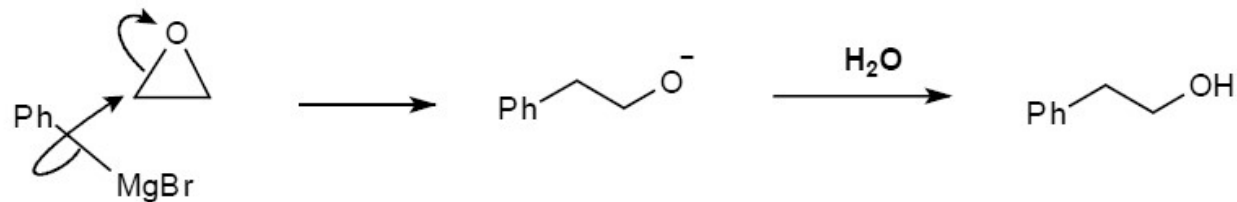




## 1,2-difunctionalised compounds

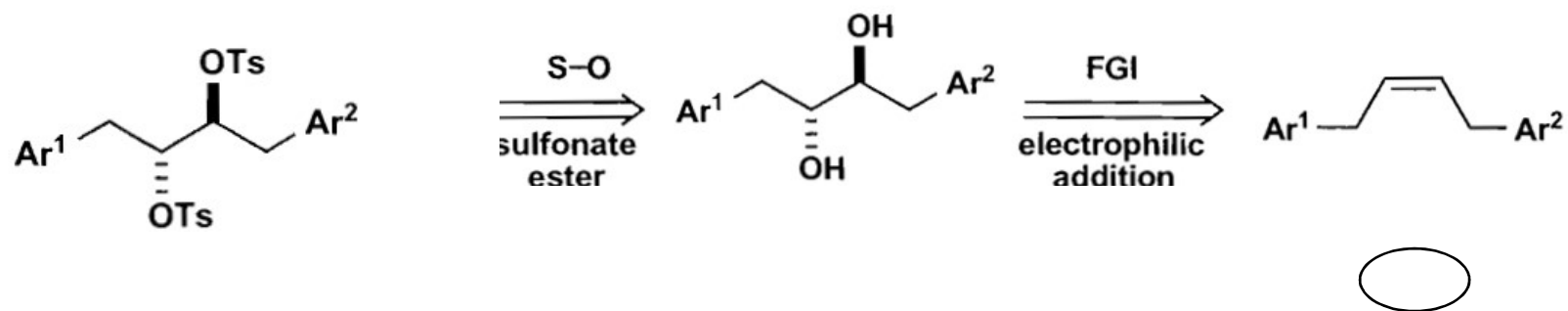
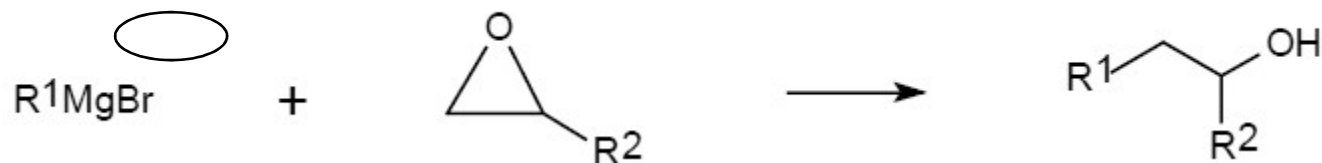


### Synthesis



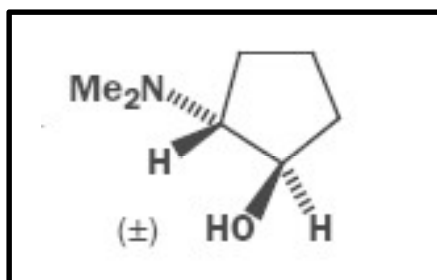


# 1,2-difunctionalised compounds

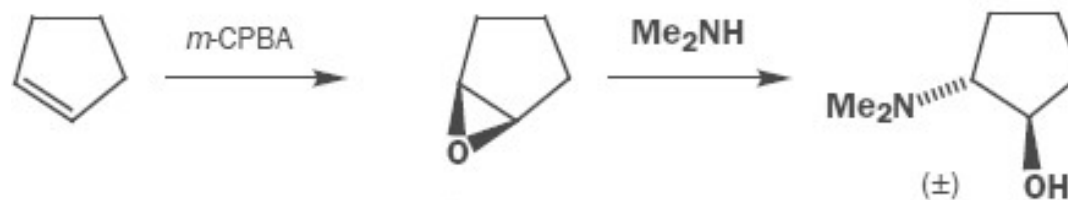




## 1,2-difunctionalised compounds

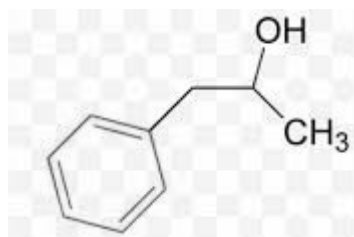


### Synthesis

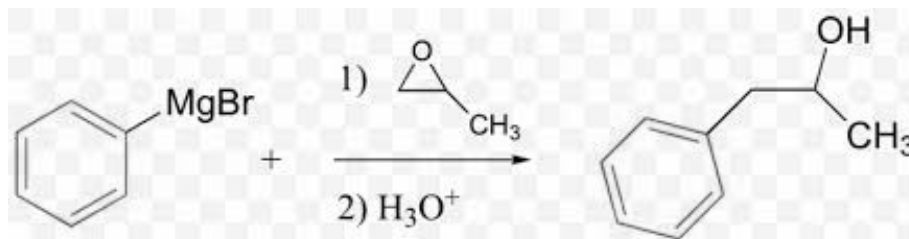




## 1,2-difunctionalised compounds



### Synthesis



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