

## PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T

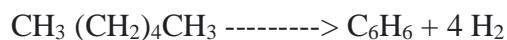
UNIT: 1 Benzene and its derivatives

CLASS: 3

### **TOPIC: Preparation of Benzene:**

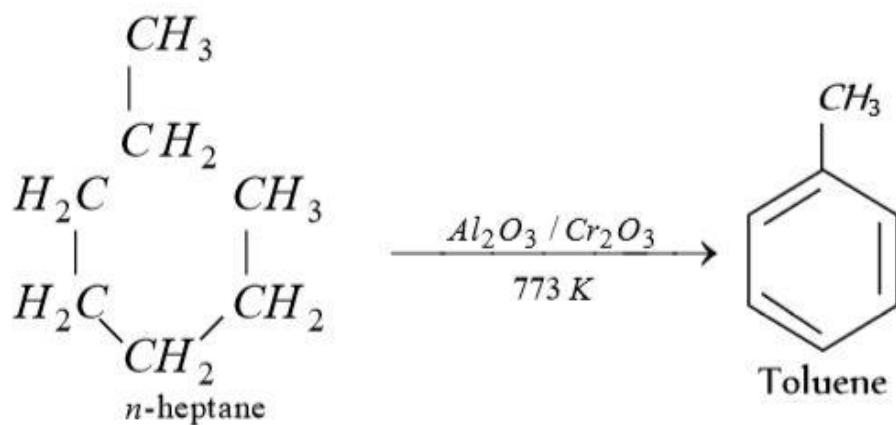
#### From Petroleum:

N-Hexane in presence of platinum to form benzene.



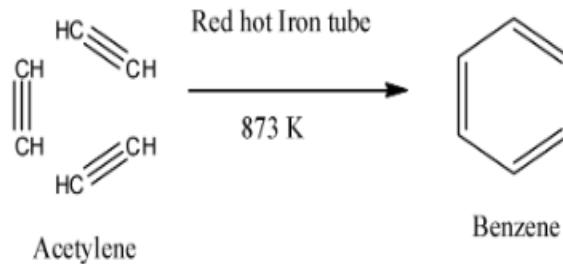
N- Hexane

Benzene



N-Heptane is reacting with aluminium tri oxide to form toluene.

#### From small scale preparations:



Acetylene is reacting under the heat condition (873 K) to form Benzene.

**Physical properties of benzene:**

Benzene is a colorless Compound, and the physical state of Benzene is liquid.

Benzene melts at 5.5 °C, and it boils at 80.1 °C.

Benzene is not miscible in water and is soluble in organic solvents.

It has an Aromatic odor.

The density of Benzene is 0.87 gm/cm<sup>3</sup> and is lighter than water.

