

(An Autonomous Institution) Coimbatore – 35

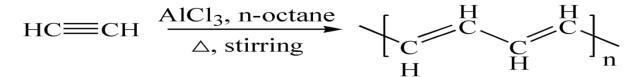


## Organic Polymer

## **Polyacetylene** (PA)

Polyacetylene (PA) was synthesized under mild conditions via polymerization of acetylene in

n-octane with AlCl<sub>3</sub> as a catalyst, Polyacetylene materials were obtained.



## Properties

- 1. Highly conductive material.
- 2. Depending upon the dopant material its properties also change and also give it tunable properties like electrochemical or optical mechanical properties, etc,
- 3. Doped polyacetylene have high electrical conductivity

## Uses

- 1. It can be used in electric wiring or electrode material in lightweight rechargeable batteries.
- 2. It can be used as a sensor to measure glucose concentration.