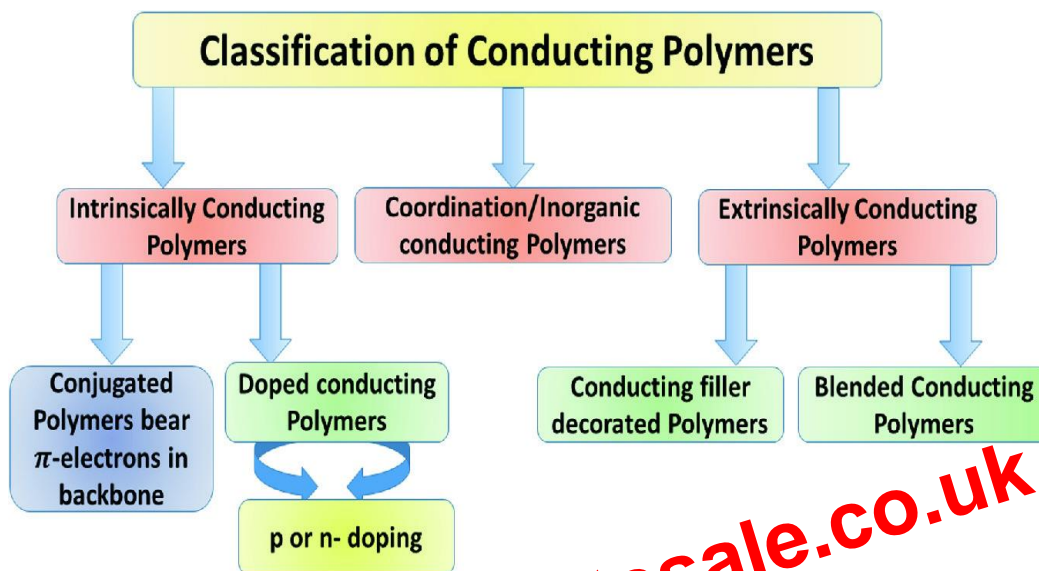


CONDUCTING POLYMERS

- Polymers which can conduct electricity are called conducting polymers.
- Ordinary polymers obtained by usual methods are nearly insulators.
- The cause of conducting current by a polymer is presence of **conjugated π electrons** in the backbone chain.



1. Intrinsically conducting polymers:

- These types of polymers have a solid backbone made up of extensive conjugated system, which is responsible for conductance.
- They may be of two types:
 - (i) Conducting polymers having conjugated π -electrons in the backbone
 - (ii) Doped conducting polymers:
 - (i) Conducting polymers having conjugated π -electrons in the backbone:**
- These polymers essentially contain a conjugated π -electron backbone responsible for electrical charge.
- The presence of conjugated π -electrons in polymers increases its conductivity, e.g. Polypyrrole, polyacetylene, polythiophene.

