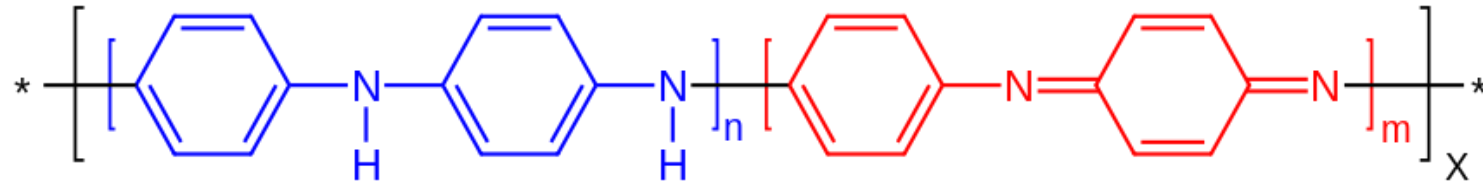
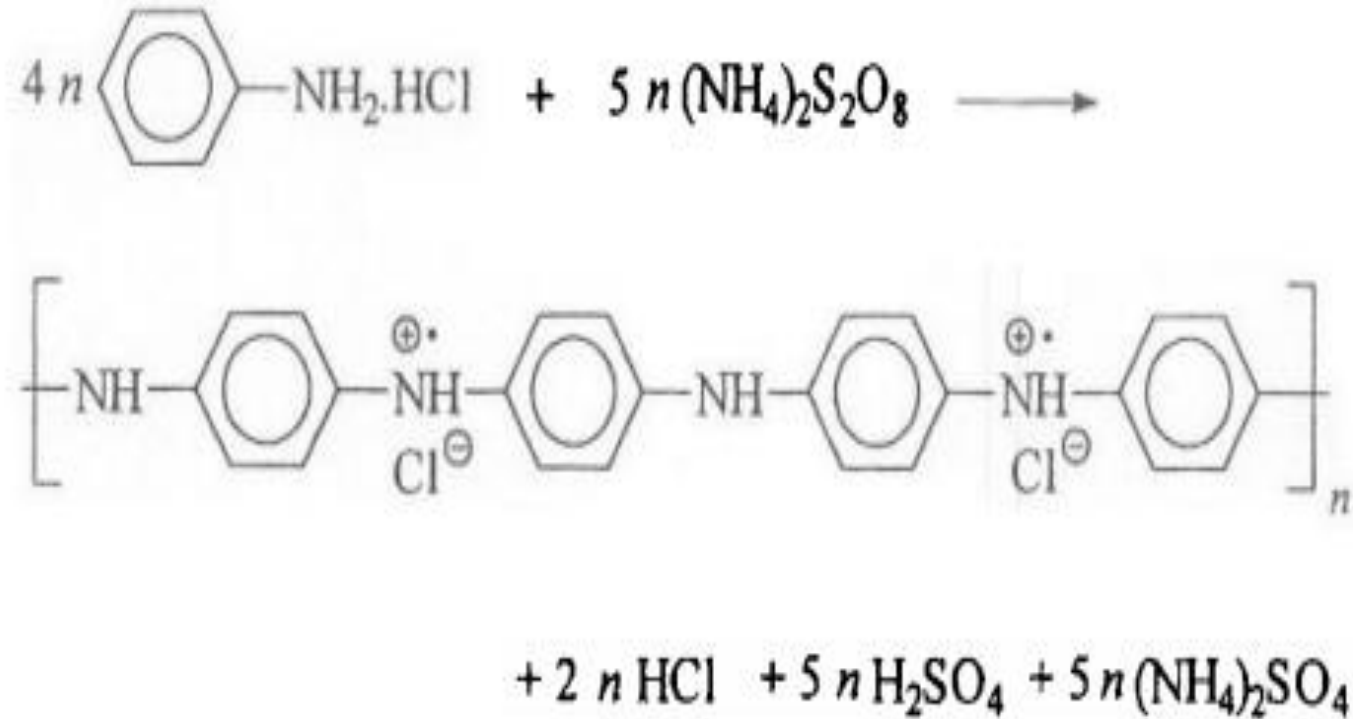


Polyaniline (PANI)



- Polyaniline is a conducting polymer of the semi-flexible rod polymer family.
- Polyaniline was discovered over 150 years ago.
- In 1980 polyaniline has captured the intense attention of the scientific community, this interest is due to the rediscovery of high electrical conductivity.
- Polyaniline is one of the most studied conducting polymer of the past 50 years.

polyaniline synthesis



Oxidation of aniline hydrochloride with ammonium peroxydisulfate yields polyaniline (emeraldine) hydrochloride.

Properties of Polyaniline

- **Polyaniline's electrical properties can be reversibly controlled by charge-transfer doping and protonation.**
- **Polyaniline is environmentally stable and inert (noble) where stainless steel is corroded.**
- **Polyaniline is applicable to electrical, electrochemical, and optical applications.**
- **Polyaniline is currently used in cell phones and calculators, and other LCD technology.**