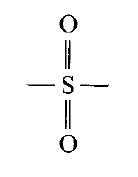
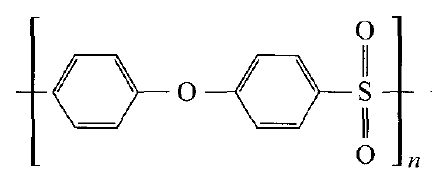
1. **Polysulfones:**

Polysulfons are a family of polymers which have linkages in their backbones .



Polysulfones have excellent mechanical properties and chemical resis­tance. One of the important polysulfones is poly( aryl sulfones) .



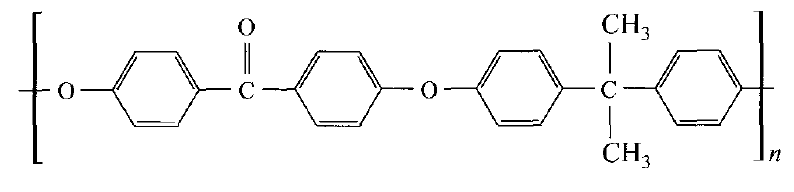
Some of the characteristics of polysulfones are:

1. Heat resistant: Heat deflection temperature ( HDT) 174°C;
2. Excellent hydrolytic stability to hot water and steam sterilization;
3. Excellent chemical resistance to inorganic acids & bases;
4. Food, water and medical contact compliance.

They are used as membranes for hemodialysis. Polysulfones have been used as orthopeadic biomaterials due to their excellent mechanical properties ( tensile modulus – 2. 4 GPa). To improve their bone-bonding properties, polysulfones were used to make composites with bioactive glass.

1. **Poly( ether ether ketone):**

The structure of Poly( ether ether ketone) (PEEK) :



PEEK is a crystalline polymer with a glass transition temperature of 145°C The most common form of PEEK is the one shown, derived from Bisphenol A, although limitless variations are possible, and a few are commercially pro­duced. PEEK is a remarkable material, highly crystalline, thermally stable, resistant to many chemicals, and very tough. It can be melt-processed at very high temperatures ( >300°C), and is useful for special applications like pipes in oil refineries and chemical plants, and parts for scientific instruments, aero­space and biomedical devices where high price is not a limitation.