

membrane sites

in an ion-selective electrode

Membranes frequently contain built-in 'fixed' charged sites (e.g. immobile $-(\text{SO}_3^-)$ in polystyrenesulfonate), or intentionally added, hydrophobically trapped, 'mobile' sites [e.g. tetraphenylborate in plasticized poly(vinyl chloride)]. Such membranes with charged sites are named sited membranes. Ions of opposite sign in the membrane are 'counter-ions'. Ions of the same sign as sites are not present in significant quantities, and are co-ions. Sited membranes are 'permselective' to counter-ions i.e. only counter-ions exchange into the membrane and therefore have some mobility in the membrane bulk.

Source:

PAC, 1994, 66, 2527 (*Recommendations for nomenclature of ionselective electrodes (IUPAC Recommendations 1994)*) on page 2532