

## crystalline electrodes

**Also contains definitions of:** heterogeneous membrane electrode, homogeneous membrane electrode

Electrodes which contain mobile ions of one sign and fixed sites of opposite sign. They may be homogeneous or heterogeneous.

1. Homogeneous membrane electrodes are ion-selective electrodes in which the membrane is a crystalline material prepared from either a single compound or a homogeneous mixture of compounds (i.e.  $\text{Ag}_2\text{S}$ ,  $\text{AgI} / \text{Ag}_2\text{S}$ ).
2. Heterogeneous membrane electrodes are formed when an active substance, or mixture of active substances, is mixed with an inert matrix, such as silicone rubber or PVC, or placed on hydrophobized graphite or conducting epoxy, to form the heterogeneous sensing membrane.

**Source:**

PAC, 1994, 66, 2527 (*Recommendations for nomenclature of ionselective electrodes (IUPAC Recommendations 1994)*) on page 2534