

9.2.5.1 Basic Definitions

Ion Exchange

The process of exchanging ions between a solution and an ion exchanger. See also 9.3.

Counter-Ions

In an ion exchanger, the mobile exchangeable ions.

Fixed Ions

In an ion exchanger, the non-exchangeable ions which have a charge opposite to that of the counter-ions.

Ion-Exchange Isotherm

The concentration of a counter-ion in the ion exchanger expressed as a function of its concentration in the external solution under specified conditions and at constant temperature.

Sorption

Uptake of electrolytes or non-electrolytes by the ion exchanger through mechanisms other than pure ion exchange.

Sorption Isotherm

The concentration of a sorbed species in the ion exchanger, expressed as a function of its concentration in the external solution under specified conditions and at constant temperature.

Ionogenic Groups

The fixed groupings in an ion exchanger which are either ionized or capable of dissociation into fixed ions and mobile counter-ions.

Co-Ions

The mobile ionic species in an ion exchanger with a charge of the same sign as the fixed ions.

Cation Exchange

The process of exchanging cations between a solution and a cation exchanger.

Anion Exchange

The process of exchanging anions between a solution and an anion exchanger.