

Electrical conductivity the ability to conduct an electric current

Electrochemistry the study of the interchange of chemical and electric current

Electrolysis a process that involves forcing a current through a cell to cause nonspontaneous chemical reaction to occur

Electrolyte a material that dissolves in water to give a solution that conducts an electric current

Electrolytic cell a cell that uses electrical energy to produce a chemical change that would not otherwise occur

Electromagnetic radiation radiant energy that exhibits wave – like behavior and travels through space at the speed of light in a vacuum

Electron a negatively charged particle that occupies the space around the nucleus of an atom

Electronegativity the tendency of an atom in a molecule to attract shared electrons to itself

Element a substance that cannot be decomposed into simpler substances by chemical or physical means. It consists of atoms all having the same atomic number

Empirical formula the simplest whole – number ratio of atoms in a compound

End point the point in a titration at which the indicator changes color

Endothermic refers to a reaction in which energy (as heat) flows into the system

Energy the capacity to do work or to cause the flow of heat

Enthalpy at constant pressure, the change in enthalpy equals the energy flow as heat

Enzyme a large molecule, usually a protein, that catalyzes biological reactions

Equilibrium constant the value obtained when equilibrium concentrations of the chemical species are substituted into the equilibrium expression

Equilibrium expression the expression (from the law of mass action) equal to

the product of the product concentrations divided by the product of the reactant concentrations, each concentration having first been raised to a power represented by the coefficient in the balanced equation

Equilibrium position a particular set of equilibrium concentrations

Equivalence point (stoichiometric point) the point in a titration when enough titrant has been added to react exactly with the substance in solution that is being titrated

Essential elements the elements known to be essential to human life

Ester an organic compound produced by the reaction between a carboxylic acid and an alcohol

Exothermic refers to a reaction in which energy (as heat) flows out of the system

Exponential notation expresses a number in the form $N \times 10^M$; a convenient method for representing a very large or very small number and for easily indicating the number of significant figures