

Summary

Electrophoresis is a technique in which charged solute particles migrate under the influence of an electric field. Many important biological molecules, such as amino acids, peptides, proteins, nucleotides and nucleic acids, possess ionisable groups and, therefore, at any given pH, exist in solution as electrically charged species either as cations or anions. Under the influence of an electric field these charged particles will migrate either to the cathode or to the anode, depending on the nature of their net charge. Mainly protein and DNA mixtures are separated by their different rates of migration in an electric field. This is best done using an electrophoresis unit or instrument.