Mutarotation is the change in specific rotation of a chiral compound due to epimerization. The term is most commonly used in carbohydrate chemistry.

eg: The monosaccharide D-glucose exists in two cyclic forms, α-D-glucose ([α]_D^{25} = +112) and β-D-glucose ([α]_D^{25} = +18.7), which are epimers and are available as pure compounds.

When one of the cyclic forms of D-glucose is added to water, it undergoes reversible epimerization to the other via the open-chain form, during which the specific rotation of the solution changes gradually until it reaches the equilibrium value +52.7°.

Contributors

• Gamini Gunawardena from the OChemPal site (Utah Valley University)