Answer on Question #49929, Chemistry, Organic Chemistry

Difference between hydrolysis and hydration as both involves the water??

Answer:

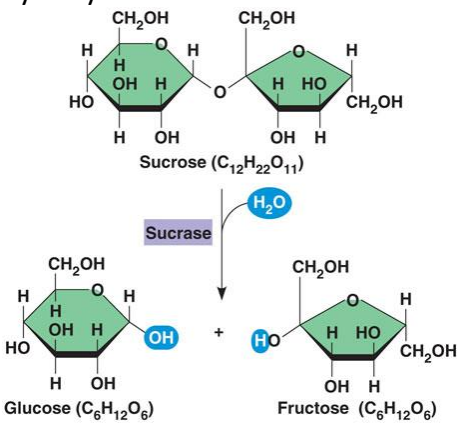
Hydrolysis - chemical decomposition reaction of the substance with water. Hydrolysis - a type of solvolysis, chemical reactions where the substances interacts with the water to provide decomposition of the starting material and form new compounds.

Hydration - joining of water molecules to molecules or ions. Hydration is a special case of solvation - joining of organic substances, solvent or molecules to the molecules or ions. Hydration in aqueous solutions leads to the formation of persistent and volatile compounds. Hydration determines the stability of the ions in solution and complicates their association. Hydration is the driving force of electrolytic dissociation - a source of energy need for the separation of oppositely charged ions.

Substance is decomposed in hydrolysis, but in hydration - no. Unlike hydration hydrolysis not accompanied by the formation of hydrogen or hydroxyl ions.

Hydrolysis

hydrolysis of sucrose



Hydration

hydration of ethene