LECTURE No 5 **Acid-base dissociation**

**Acid-base dissociation** refers to the process where compounds split into ions. Here are some key points:

1. **Strong acids** (e.g., hydrochloric acid) completely dissociate into hydrogen ions and chloride ions in water.
2. **Strong bases** (e.g., sodium hydroxide) fully dissociate into sodium ions and hydroxide ions.
3. [**Weak acids and bases** partially dissociate, existing in both ionized and un-ionized forms**1**](https://www.bing.com/ck/a?!&&p=2df7a09e3cc9ba85268272e6f86ebdaebd5eba12c92d0ff049f427c77833dc61JmltdHM9MTczNjAzNTIwMA&ptn=3&ver=2&hsh=4&fclid=31774b2e-04d6-6b1e-0d66-58c9057a6a67&psq=acid+base+dissociation&u=a1aHR0cHM6Ly93d3cuam92ZS5jb20vc2NpZW5jZS1lZHVjYXRpb24vMTEzOTUvYWNpZGJhc2Utc3RyZW5ndGhzLWFuZC1kaXNzb2NpYXRpb24tY29uc3RhbnRz&ntb=1)[**2**](https://www.bing.com/ck/a?!&&p=e9ad34b35ddac6825f7666c9df0bda4ca4dbd420d3162877a0b0e0b2bccb6e9aJmltdHM9MTczNjAzNTIwMA&ptn=3&ver=2&hsh=4&fclid=31774b2e-04d6-6b1e-0d66-58c9057a6a67&psq=acid+base+dissociation&u=a1aHR0cHM6Ly93d3cudGhvdWdodGNvLmNvbS9waC1wa2Eta2EtcGtiLWFuZC1rYi1leHBsYWluZWQtNDAyNzc5MQ&ntb=1)[**3**](https://www.bing.com/ck/a?!&&p=543ae2f294d865fdb5ff4beb0e2e91a979dab0095c3e2426054a1411631c0902JmltdHM9MTczNjAzNTIwMA&ptn=3&ver=2&hsh=4&fclid=31774b2e-04d6-6b1e-0d66-58c9057a6a67&psq=acid+base+dissociation&u=a1aHR0cHM6Ly9zY2llbmNlcmVhZHkuY29tLmF1L3BhZ2VzL2FjaWQtYW5kLWJhc2UtZGlzc29jaWF0aW9u&ntb=1).

In chemistry, an acid dissociation constant (also known as acidity constant, or acid-ionization constant; denoted ⁠⁠) is a quantitative measure of the strength of an acid in solution. It is the equilibrium constant for a chemical reaction

known as dissociation in the context of acid–base reactions. The chemical species HA is an acid that dissociates into A , called the conjugate base of the