

general acid catalysis

The catalysis of a chemical reaction by a series of Brønsted acids (which may include the solvated hydrogen ion) so that the rate of the catalysed part of the reaction is given by $\sum k_{\text{HA}} [\text{HA}]$ multiplied by some function of substrate concentrations. (The acids HA are unchanged by the overall reaction.) General catalysis by acids can be experimentally distinguished from specific catalysis by hydrogen cations (hydrons) by observation of the rate of reaction as a function of buffer concentration.

See also: catalytic coefficient, intramolecular catalysis, pseudo-catalysis

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1117