



ACROSS

- 1 Aromatic _____ is an organic reaction in which a hydrogen atom on an arene is replaced by a sulfonic acid functional group through electrophilic aromatic substitution.
- 6 _____-substitution is the arene substitution pattern in which the substituents occupy the opposite ends, positions 1 and 4.
- 7 _____ occurs with aromatic organic compounds via an electrophilic aromatic substitution mechanism involving the attack of the electron-rich benzene ring by the nitronium ion.
- 9 Electrophilic aromatic _____ is a type of electrophilic aromatic substitution in which a halide substituent is added to an aromatic system.
- 10 Nucleophilic aromatic _____ is a reaction in which the nucleophile displaces a good leaving group, such as a halide on an aromatic ring.

DOWN

- 2 _____ is the process of adding an acyl group to a compound, which may occur in electrophilic aromatic substitution via the Friedel-Crafts mechanism.
- 3 _____-substitution is the arene substitution pattern in which two substituents occupy positions next to each other, which may be numbered 1 and 2.
- 4 Electrophilic aromatic _____ is an organic reaction in which an atom, usually hydrogen, appended to an aromatic system is replaced by an electrophile.
- 5 A _____ is an uncharged reactive intermediate derived from an aromatic system by removal of two ortho substituents, which leaves two orbitals with two electrons distributed between them.
- 8 _____-substitution is the arene substitution pattern in which the substituents occupy positions 1 and 3.