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List of Abbreviations

| | | |
|--------------------------------|---|-------------------------------------------------|
| BR-SAC | - | <i>Bauhinia Racemosa</i> Sulphuric acid Carbon |
| BR-PAC | - | <i>Bauhinia Racemosa</i> Phosphoric acid Carbon |
| CAC | - | Commercial Activated Carbon |
| CV | - | Crystal Violet |
| AB110 | - | Acid Blue110 |
| RB5 | - | Reactive Black5 |
| CR | - | Congo Red |
| TSS | - | Total Suspended Solids |
| TDS | - | Total Dissolved Salts |
| BOD | - | Biological Oxygen Demand |
| mg | - | Milligram |
| g | - | Gram |
| ml | - | Milliliter |
| K | - | Kelvin |
| °C | - | Degree Centigrade |
| C.I | - | Colour Index |
| ZnO | - | Zinc Oxide |
| TiO ₂ | - | Titanium dioxide |
| PAC | - | Powdered Activated Carbon |
| GAC | - | Granular Activated Carbon |
| FESEM | - | Field Emission Scanning Electron Microscope |
| FTIR | - | Fourier Transform Infrared Spectroscopy |
| rpm | - | rotation per minute |
| H ₂ SO ₄ | - | Sulphuric acid |
| NaOH | - | Sodium hydroxide |
| NO ₃ ²⁻ | - | Nitrate ion |

| | |
|---------------------------------|----------------------------------------|
| SO_4^{2-} | - Sulphate ion |
| PO_4^{2-} | - Phosphate ion |
| Cl^- | - Chloride ion |
| kJmol^{-1} | - Kilo Joule per mole |
| $\text{Jmol}^{-1}\text{K}^{-1}$ | - Joule per mole per Kelvin |
| ΔG | - Free Energy Change |
| ΔH | - Heat Energy Change |
| ΔS | - Entropy Change |
| λ_{max} | - Wavelength |
| CAS | Chemical Abstract Service |
| Sec | - Second |
| BET | - Brunauer Emmett Teller |
| Nm | - Nanometer |
| μm | - micrometer |
| cm^{-1} | - per centimeter |
| mol^{-1} | - per mole |
| K | - Kelvin Temperature |
| kJ | - kilo Joule |
| m^2 | - Square meter |
| mg/l | - milligram per liter |
| mg/g | - milligram per gram |
| m^2/g | - Square meter per gram |
| N | - Normality |
| min^{-1} | - per mintue |
| mm | - Millimeter |
| C_o | - Initial dye concentration (mg/l) |
| C_e | - Equilibrium dye concentration (mg/l) |