

Water is a vital resource to support human life, which can be more exploited by humans than any other resource for the essence of life. The rapid pace of industrial activity, population expansion, and unplanned urbanization have mainly contributed to the severe deterioration of water quality. Undoubtedly, water is a distinctive substance, as it can naturally renew and purify itself by evaporation and precipitation, allow pollutants to settle down through the process of sedimentation or break down, or dilute the pollutants to a point where the concentrations are not detrimental.