

Analysis of Water Quality

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Abstract: *Water is one of the most essential natural resources, second only to air. Despite covering a significant portion of the Earth's surface, only a small fraction of water is suitable for direct use, making it a limited and valuable resource. Due to increasing contamination and pollution, freshwater is no longer safe for direct consumption, necessitating proper treatment before drinking or industrial applications. Regular monitoring of water sources is crucial to assess their health, as deteriorating water quality poses environmental risks and threatens ecosystems. In industrial settings, poor water quality can lead to hazards and economic losses. Therefore, water quality analysis is essential for ensuring its suitability for various purposes. The quality of water is influenced by its source, geological interactions, and the level of contaminants it encounters. Factors such as dissolved solids, solubility of geological deposits, sediment contact, and environmental conditions impact water quality. Physical examination, including parameters like color, conductivity, odor, turbidity, and hardness, provides key insights into water quality. Ensuring the suitability of water requires systematic assessment and monitoring*

Keywords: Water quality, water monitoring, water assessment, water analysis, physical examination, color, conductivity, odor, turbidity, hardness, contamination, pollution, industrial water treatment

