

# Comparative Study of Seasonal Variation in Physico - Chemical Characteristics in Drinking Water Quality of Kanpur, India With Reference To 200 MLD Filtration Plant and Ground Water

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### Abstract :

In the present work various physico chemical parameters i.e. Turbidity, temperature, pH, total

hardness , Iron, Chlorides, Dissolved Solids, Calcium, Sulphate, Nitrate, Fluoride, Chromium, total alkalinity are analyzed for various seasons; Summer, Monsoon, Autumn, Winter, Spring for the period (April-December-2008 and (January- March-2009) in the surface water, ground water and filtration plant treated water of Kanpur city. Significant variation of physico - chemical parameters of surface water were observed; various physico-chemical parameters for the water samples were within highest desirable limit (HDL) prescribed by WHO for drinking purposes for all seasons except for pH in summer, Total alkalinity and Fe contents in spring, autumn and winter; Total dissolved solids in winter, Turbidity in all seasons. The observations imply that Ganga water in monsoon is better than winter seasons, where as the ground water was found better in winter compared to that of summer season. The results suggest that the quality of surface water improved after treatment in filtration plant as compared to ground water.[Nature and Science.2010:8(4):11-17] (ISSN: 1545-0740)

### Key Word :

Physico-chemical Parameters, Ganga water, Canal Ganga Water, Treated water, Ground water.

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