

APPLICATION OF COMPUTER TECHNIQUES FOR THE DETERMINATION OF HYDROCHEMICAL FACIES

Shankar. B.S

Research Scholar, Dr.MGR University.
876, 18th main, 38th cross, 4th 'T' Block, Jayanagar,
Bangalore -560 041
E Mail: shankar_bs1@yahoo.co.uk

Shivakumar. N.D

Senior Scientific Officer, CPDM, IISC ,Bangalore
E Mail: shivak@cpdm.iisc.ernet.in

Dayananda Reddy. K.L

Project Engineer, TTI Consulting Engineers pvt ltd, Bangalore
E Mail : dayanandareddy@rediffmail.com

ABSTRACT

Hydrochemical facies represent distinct zones with definite cation and anion concentrations and depicts the diagnostic chemical characteristics of water in various parts of the system. Hydrochemical facies reflect the effects of chemical processes occurring between the minerals with in the lithological framework and groundwater. The present study aims at the evaluation of hydrochemical facies for the groundwaters of Bommanahalli industrial area of Bangalore using a computer technique. In this connection, 60 groundwater samples (30 each in the pre and post- monsoon seasons of 2007) have been drawn from the area and subjected to a comprehensive Physico - Chemical analysis. From the results of the study, hydrochemical facies have been derived and discussed for all the samples and their suitability for different purposes such as irrigation purposes based on the groundwater and the soil thro which it percolates above have been highlighted.