

Three Day Online Training Course
On
Groundwater Quality and Stable Isotope Characterization for Salinity Studies

(Under NHP-PDS)
(December 21-23, 2020)



Organised by

DELTAIC REGIONAL CENTRE
NATIONAL INSTITUTE OF HYDROLOGY
KAKINADA – 533 003, A.P

Introduction:

Groundwater plays a crucial role for securing safe water supply, but its availability vary from one region to the other. In the countries like India, increase in population, urbanisation, industrialisation, changes in land use/cover, unsewered conditions impacted the groundwater quality over a period time, thus groundwater become unfit for drinking in many parts of the country. In recent years, increasing phenomena of groundwater salinization in shallow dug wells and deep wells are being reported in several places (both coastal and inland areas) in India. The various processes such as sea water intrusion, shallow groundwater evaporation and discharges of untreated effluents from the aqua ponds into local surface water bodies (drains and canals) are major factors that lead to contaminate the groundwater. These salinity processes could be systematically identified using groundwater chemistry and isotopic studies. Hence, there is an

urgent need for proper assessment and management of the aquifers in our country using hydrogeochemical and stable isotope tracer techniques.

The scientific understanding of groundwater salinity using hydrochemistry and isotope characteristics is utmost important for the sustainability of coastal aquifers. Hence the training course is to focus on understanding of salinity in the aquifer systems and protection of groundwater against contamination and its impact on groundwater resources using groundwater quality and stable Isotopes analysis. The course is designed for engineers and researchers working in the field of water quality monitoring and data processing.

About the Institute:

National Institute of Hydrology (NIH) is a premier Research Institute of Govt. Of India under Dept. of Water Resources, RD &GR, Ministry of Jal

Shakti engaged in pure & applied research in the field of Hydrology and Water Resources.

The Deltaic Regional Centre, located in Kakinada is one of the Regional centers deals with the hydrological problems of Coastal and Delta regions of the East coast of India. For more information please visit web site:nihroorkee.gov.in

Course Content:

The course will consist of lectures on water quality parameters and their impact on the health, monitoring and measurement of water quality parameters, Data Analysis and Isotope techniques to find the sources of pollution. The lectures will be supported by tutorials and hands-on training. The faculty comprises of Scientists from NIH and experts from other reputed organizations. The course mainly comprises of the following topics.

- Introduction of water quality and stable Isotopes
- Collection of water samples for chemical quality and isotopes
- Water quality and stable Isotope parameters
- Data processing and analysis
- Usage of Hydrochemistry and Isotopes for salinity studies

Eligibility:

Engineers, Persons working on water quality aspects, Junior/middle Level Officers of Govt., Semi Govt. are eligible.

Registration Fee:

NO REGISTRATION FEE. Any Govt., Officer can register in the following link on or before 10-12-2020.

(For registration:

<http://nhp.mowr.gov.in/HomeNew/NHP Indexnew.aspx>)

Course Coordinators:

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