

About the Book

The book propose to address: 1 the extent to which the reductive dissolution of as-bearing Fe (III) oxides hypothesis is applicable. 2. The sustainability of the deeper aquifer system (s) as an alternate arsenic-free water source. 3. The vertical connectivity between the shallow and deeper aquifer systems(s) and the lateral heterogeneity of aquitards/semi-confining layers. 4. The type of groundwater extraction strategies required to maintain the sustainability of the deeper aquifer system and institutional approach to address and mitigate

Contents:

- ❖ *Role of Fluvial Geomorphology and sedimentology in Arsenic Distribution*
 1. *Hydro geochemical Evolution in the different shallow aquifers of central Gangetic plain and Kosi alluvial fan and their implications for the distribution of groundwater arsenic*
 2. *Assessment of subsurface lithology by resistivity survey coupled with hydrochemical study to identify arsenic distribution pattern in central Gangetic plain: A case study of Bhagalpur district Bihar India*
 3. *Arsenic contamination in groundwater in the middle Gangetic plain, India: its relations to fluvial geomorphology and Quaternary stratigraphy*
- ❖ *Groundwater Arsenic Characterizations and Risk Assessments*
 1. *Preliminary Assessment of arsenic distribution in Brahmaputra river basin of India based on examination of 56,180 public groundwater wells*
 2. *Problem, perspective and challenges of arsenic contamination in the groundwater of Brahmaputra flood plains and Barak valley regions of Assam, India*

3. *Arsenic contamination of groundwater in Barak valley, Assam India*
4. *Hydro geochemistry and arsenic distribution in the Gorakhpur district in the middle genetic plain India*

❖ *Arsenic hydrogeochemistry and process*

1. *Arsenic distribution and mobilization*
2. *Understanding hydrogeochemical process governing arsenic contamination and seasonal variation in the groundwater of Bexar district, India*
3. *Chemical characteristics of arsenic conterminal ground water in part of middle –Gangetic plain (MGP) in Bihar India*
4. *An insight into the spatio-vertical heterogeneity of dissolved arsenic in part of the Bengal Delta plain Aquifer in West Bengal*
5. *Surface Generated Organic matter: An Important Driver for arsenic Mobilization in Bengal Delta Plain*
6. *A comparative study on the Arsenic Levels in groundwater of Gangetic Alluvium and coastal aquifers in India*
- 7.

❖ *Arsenic in food chain, Health and its remediation*

1. *Groundwater arsenic contamination in Bengal Delta and its Health effects*
2. *Impact of arsenic contaminated Irrigation water on some edible crops in the fluvial plains Bihar*