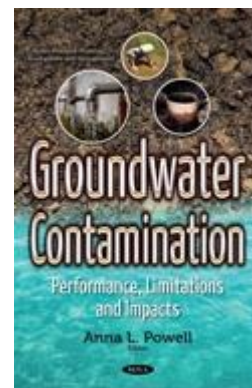


## Groundwater Contamination: Performance, Limitations and Impacts

**Editors:** Anna L. Powell

### **Book Description:**

Groundwater contamination is nearly always the result of human activity. In areas where population density is high and human use of the land is intensive, ground water is especially vulnerable. Virtually any activity whereby chemicals or wastes may be released to the environment, either intentionally or accidentally, has the potential to pollute groundwater. When groundwater becomes contaminated, it is difficult and expensive to clean up. This book focuses on the performance, limitations and impacts of groundwater contamination. (Imprint: Nova)



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Chapter 5. Fluoride as a Pollutant in Some Brazilian Aquifer Systems

(Daniel Marcos Bonotto and Gabrielle Roveratti, Departamento de Petrologia e Metalogenia, Universidade Estadual Paulista (UNESP), Rio Claro, São Paulo, Brazil, and others)

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*Chapter 3*

## **GROUNDWATER CONTAMINATION: PERFORMANCE, EFFECTS, LIMITATIONS AND CONTROL**

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### **ABSTRACT**

The decisive role of groundwater as a decentralized source of drinking water both in rural and urban settings cannot be underrated. It accounts for nearly 80 percent of the rural domestic water needs, and 50 percent of the urban water needs. The inevitable importance of groundwater to humankind has led to its over-exploitation which is now resulting to aquifer contamination. Although many cases of contaminated groundwater have occurred throughout the globe, few successful experiences in remediating the problems are identifiable at this time. Many countries are in the early process of identifying their potential groundwater contamination problems while others are seeking for its remedy. At present, many innovative technologies are being evaluated for their usefulness and swift responses to groundwater contamination control as the conventional extraction and treatment processes have often proven to be very expensive and slow with respect to remediating the

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