

Contaminant Geochemistry

Interactions and Transport in the Subsurface Environment

Bearbeitet von
Brian Berkowitz, Ishai Dror, Bruno Yaron

1. Auflage 2008. Buch. XIV, 412 S. Hardcover
ISBN 978 3 540 74381 1
Format (B x L): 21 x 29,7 cm
Gewicht: 801 g

[Weitere Fachgebiete > Geologie, Geographie, Klima, Umwelt > Umweltpolitik, Umwelttechnik > Umweltüberwachung, Umweltanalytik, Umweltinformatik](#)

schnell und portofrei erhältlich bei

The logo for beck-shop.de features the text 'beck-shop.de' in a bold, red, sans-serif font. Above the 'i' in 'shop' are three red dots of increasing size. Below the main text, the words 'DIE FACHBUCHHANDLUNG' are written in a smaller, red, all-caps, sans-serif font.

beck-shop.de
DIE FACHBUCHHANDLUNG

Die Online-Fachbuchhandlung beck-shop.de ist spezialisiert auf Fachbücher, insbesondere Recht, Steuern und Wirtschaft. Im Sortiment finden Sie alle Medien (Bücher, Zeitschriften, CDs, eBooks, etc.) aller Verlage. Ergänzt wird das Programm durch Services wie Neuerscheinungsdienst oder Zusammenstellungen von Büchern zu Sonderpreisen. Der Shop führt mehr als 8 Millionen Produkte.

Part II

Properties of Potential Contaminants: Environmental and Health Hazards

In Part II, we discuss the potential sources, chemical properties, and toxicity of several major groups of contaminants found in the subsurface environment. Usually, the release of contaminants to the environment originates from anthropogenic processes. Even when the contaminants are naturally occurring species, we often find that human intervention or changes in natural conditions are involved in the development of pollution. Furthermore, many contaminants are relatively persistent and therefore may be found in the subsurface environment long after their actual release.

The massive industrial development that has improved quality of life and affected the world over the last two centuries also has had a profound impact on the amounts and types of compounds released to the subsurface. During this period, many thousands of new materials have been produced, used, stored, and transported. The amounts of these substances produced, used, and subsequently discarded also have increased exponentially, leading to the release of huge amounts of contaminants to the environment. In parallel, the understanding that many compounds may be toxic or hazardous to ecological systems, in general, and to humans, in particular, has gradually evolved during the last 50 years. This understanding is dependent largely on complex analytical capabilities: environmental samples contain very low concentration of target substance(s), and such samples often contain large amounts of interfering compounds.

Part II divides contaminants into two groups: inorganic substances and organic compounds. The following chapters touch only a small portion of the potential contaminants that belong to each group; we chose representative materials that provide a broad view of the subject.

Finally, it should be mentioned that, because other aspects of chemical interactions and transport of such substances in the subsurface environment are discussed in other parts of this book, we focus here on the contamination potential of these compounds.