

Geothermal Water Management

Availability of and adequate accessibility to freshwater and energy are two key technological and scientific problems of global significance. At the end of the 20th century, the deficit of water for human consumption and economic application forced us to focus on rational use of resources. Increasing the use of renewable energy sources and improving energy efficiency is a challenge for the 21st century. Geothermal energy is heat energy generated and stored in the Earth, accumulated in hydrothermal systems or in dry rocks within the Earth's crust, in amounts which constitute the energy resources. The sustainable management of geothermal energy resources should be geared towards optimization of energy recovery, but also towards rational management of water resources since geothermal water serves both as energy carrier and also as valuable raw material. Geothermal waters, depending on their hydrogeothermal characteristics, the lithology of the rocks involved, the depth at which the resources occur and the sources of water supply, may be characterized by very diverse physicochemical parameters. This factor largely determines the technology to be used in their exploitation and the way the geothermal water can be used. This book is focused on the effective use of geothermal water and renewable energy for future needs in order to promote modern, sustainable and effective management of water resources. The research field includes crucial new areas of study: • an improvement in the management of freshwater resources through the use of residual geothermal water; • a review of the technologies available in the field of geothermal water treatment for its (re)use for energetic purposes and freshwater production, and • the development of balneotherapy. The book is aimed at professionals, academics and decision makers worldwide, water sector representatives and administrators, business enterprises specializing in renewable energy management and water treatment, working in the areas of geothermal energy usage, water resources, water supply and energy planning. This book has the potential to become a standard text used by educational institutions and research & development establishments involved in the geothermal water management.

152,17 €

142,22 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781138749009

Medium: Buch

ISBN: 978-1-138-74900-9

Verlag: CRC Press

Erscheinungstermin: 08.08.2017

Sprache(n): Englisch

Auflage: 1. Auflage 2017

Serie: Sustainable Water Developments - Resources, Management, Treatment, Efficiency and Reuse

Produktform: Kartoniert

Gewicht: 1043 g

Seiten: 462

Format (B x H): 174 x 246 mm

