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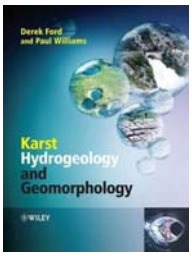
Karst Hydrogeology and Geomorphology, by Derek Ford & Paul Williams, 2007. Wiley & Sons Ltd., The Atrium, Southern Gate, Chichester, West Sussex PO 19 8SQ, England (customer@wiley.co.uk). 576 pages. Price paperback GBP 34.95; EUR 52.50; ISBN 978-0-470-84997-2. Price hardcover GBP 90.00; EUR 135.00; USD 140.00; ISBN 978-0-470-84996-5.



This books presents an extensive, up-to-date work on karst systems. Everything anyone may want to know about karst is included in the book, which is useful for geomorphologists, sedimentary petrologists, sedimentologists, geochemists and, of course, paleoclimatologists. The social and economic interests of karst regions are highlighted throughout the book. Although it may, at a first glance, look difficult to find your way because of the detailed subdivision into different parts, a closer look shows that the contents are easy to follow because everything is clearly explained, in spite of the wide variety of topics that are covered. The book is organized in twelve chapters.

The two first chapters are introductory to karst systems, providing basic concepts and giving karst its place within the earth system. The various types of karst rocks and minerals are presented, and the second chapter can be used as an introduction to carbonate rocks and evaporites. The main characteristics of the rocks that can be affected by karst development are also analysed.

The third chapter deals with the dissolution processes and the behaviour of the karst-affected rocks. All the factors involved in dissolution of carbonate and noncarbonate rocks are analysed in detail, including the biogenic processes. The chapter concludes with a thorough review of the dissolution and precipitation kinetics of karst-sensitive rocks; it appears very useful to understand the behaviour of these rocks in karst systems, but also in their sedimentary environments.

In Chapters 4, 5, and 6, the reader is introduced to karst geomorphology and hydrogeology, and ends with an extensive treatment of the drainage systems of karst areas. These three chapters provide the tools for a better understanding of why and how karst develops, and what are the main factors controlling karst development. These chapters help also to understand better the hydrogeology in karstic and non-karstic terrains.

Chapters 7 and 8 focus on the formation of caves and the characteristics of their interior. They include a variety of cave classifications, describing examples and data from many caves all over the world. The cave deposits are analysed very precisely, and sketches of the growth patters are included. The timing of speleothem formation is discussed on the basis of several actual examples.

Karst landforms in humid regions are discussed in chapter 9, including karst in evaporite terrains.

The last three chapters (10, 11, and 12) have a direct impact on the preservation of karst systems and their importance as natural resources. Chapter 10 focuses on the influence of climate and sea-level changes on karst development. Determination of the available water resources and groundwater vulnerability are the main topics of chapter 11. The book ends with a chapter (12) devoted to human impact and environmental rehabilitation. The sustainable management of karst and the values or karst terrains are easy to understand reading this chapter.

The book is fairly easy reading, although some parts are of a level that may be too high for undergraduate, but it is more than a good starting point for karst researchers, and it provides an extensive list of references and case studies that make it easy to look for any information related to karsts. The figures are clear and help the reader to understand the book. The photographs are also well reproduced, and they cover all the karst aspects. All the figures are in black and white; some colour photos will have made the book even more attractive.

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