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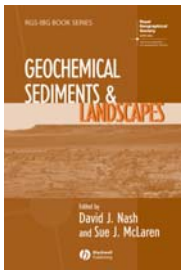
Geochemical Sediments & Landscapes, edited by David J. Nash & Sue J. McLaren, 2007. Blackwell Publishing (now: Wiley-Blackwell), 2007. Hardback, 465 pages. Price USD 89.50, GBP 60.00. ISBN 9781405125192.



The editors of this book have composed an excellent, up-to-date overview of continental chemical deposits ranging from duricrusts to deposits generated in more active depositional settings. It is organized in fourteen chapters, which are all of interest, and which focus on most types of chemical sediments that are formed on continents.

The book begins and ends with two general and short chapters on geochemical sediments and the landscapes in which they occur. This provides a good introduction and a useful overview of the book's contents, the significance of continental chemical sediments, remaining questions and research that should be carried out in the future.

An up-to-date overview of duricrusts is provided in Chapters 2-4; these three chapters are extensive and include detailed and thorough analyses of duricrusts. It is the first time that the various types of duricrusts are treated together, and these chapters thus provide information about such crusts formed in strongly different geomorphological and climatic settings that was not present in such a framework before. Chapters 5-12 analyse deposits formed in different geological settings, ranging from eolian to spring to karst to lakes to deserts, amongst many more.

Although most of the analysed deposits are continental, it is difficult to see the logic behind the organisation of these chapters: there are many differences between these deposits. This is perhaps the most important shortcoming of the book: in some cases the chapters refer to environments whereas other chapters deal with specific features (such as rock varnish). There can be no doubt as regards the importance of all these chapters, but I would have appreciated a general overview providing a context, or at least a more clear classification. Some aspects of diagenesis should also have been included. Chapter 13, on the analytical techniques applied for the investigation of geochemical sediments, is also of interest for the study of other types of sediment, and is therefore of great use for a variety of readers, teachers and undergraduates.

The individual chapters are well organized, which proves good directives from the side of the editors. They have been written by internationally recognised experts who integrated their current research within a wider context provided by numerous case studies from all over the world. Each chapter describes the main characteristics of the sedimentary bodies that are focused on; morphology, petrography, chemical and mineralogical composition all get due attention. The genetic processes, the sediment's relationship with the landscape and paleoenvironments as well as suggestions for future research are also addressed in most of the chapters. Special emphasis is placed on the geomorphological settings of the deposits.

The list of references is very complete and makes much information accessible to the reader. In addition, the book contains a useful list of figures and tables. The size of the book is handsome and the printing is of good quality, particularly with respect to the line drawings and tables. The quality of the photos is, however, not always high, and some pictures would certainly be much more appreciated by most readers if printed in full colour.

In summary, this volume contributes substantially to a better understanding of several earth-surface processes. It is a book that many earth scientists interested in geomorphology, weathering, soils and continental paleoenviroments long have waited for. It is a key text for undergraduates, graduates and researchers because it provides a wide and detailed view of both geochemical sediments and their settings. It is certainly indispensable for libraries of any earth-science department, for both teaching and research purposes.

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