BOOK REVIEWS

Geochemical Sediments & Landscape
by D. J. Nash & S. J. McLaren (Eds.)

The book edited by Goudie & Pye (1983) a quarter of century ago had set such a high standard that writing a second edition posed a considerable challenge. However, this new edition edited by David Nash and Sue McLaren managed to bring together 11 specific topics by 19 international authors. The new edition retains the look and feel of the first, and it is only by delving into specific topics that the substantial changes become clear. Coverage of some topics has been reduced from the first edition, but with little loss of substance. After an introductory overview of the Geochemical Sediments in Landscape by the two editors, the next eleven chapters provide a thorough and expanded presentation of the following topics: calcite, laterite, silcrete, aeolianite, tufa and travertine, speleothems, rock varnish, lacustrine and palustrine sediments, evaporites, beachrocks and intertidal precipitates, and sodium nitrate deposits. The authors of these chapters use a variety of local and global examples. Each chapter concludes with a section designed to illustrate the "Directions for future research".

A useful chapter on the range of techniques (spectroscopic, electron microprobe, environmental scanning electron microscope, laser methods - ICP-MS, SHRIMP-, isotopes, XRD, etc.) available for analyzing geochemical sediments precedes the concluding chapter, which is a general summary that emphasizes the major peculiarities of the near-surface geochemical sediments covered in this book.

I highly recommend this book as a need for any geomorphologist, scientist, environmental engineer, and graduate students interested in the related subjects of the book.


Cave Geology
by A.N. Palmer

Cave Books, 2007, 454 pp.;

This book is a comprehensive reference text that opens with an introduction to speleology, the science of caves. The remaining 14 chapters include specific topics like, karst rock types, underground water in karst and its chemistry, the origin of caves, characteristics of solution caves, speleothems and minerals, cave meteorology, cavities in volcanic rocks, studies of past climates using cave deposits, application of cave geology to other geosciences.

The book contains numerous explanatory boxes and matching photographs. The author employs a minimum of thoughtfully written text, eminently readable, and a maximum of clear, well-labelled diagrams and black/white photos such that with only a little mental effort the reader could escape the confines of the lecture room and imagine themselves tramping over the karst landscape and “viewing” the geology of caves beneath.

Cave Geology is an essential toolkit for the aspiring student and not only. Without question it will serve as a valuable standard reference and is destined to be around for a long time as a recommended course textbook. The author should be congratulated (and the publishers commended) for such a fine effort.

Karst Hydrogeology and Geomorphology
by D.C. Ford & P. Williams


This is the 2nd edition of a successful book, which first appeared in 1989 at Chapman & Hall. In the 18 years between the two editions there have been a tremendous advance in our techniques and in our understanding of karst environment, hence this edition is welcome. The book is primarily aimed for graduate students and researchers, but is a valuable resource for any earth scientist.

Given the range of developments in the last two decades, it is necessarily, a large book (562 pp) with 50 pages of references, all in reduced font size. Despite its bulk, it is well written, logically organized in twelve chapters (e.g., karst rocks, dissolution, karst hydrogeology and drainages, speleogenesis, cave deposits, karst water resources, etc.). Above all, it is a handsome volume with many hundreds of photographs and line drawings. Putting together and synthesizing information from an impressive bibliography, Ford & Williams have produced a coherent and scholarly overview that provides a benchmark for karst science.

For any textbook the proof is in the pudding; that is, will a teacher adopt it in her/his classroom? I teach a graduate course (majors and nonmajors in geology) entitled Karst Geology. Both books reviewed above are use to complement each other and my own one in this class.

Bogdan P. ONAC