

Sandstone Diagenesis—Recent and Ancient, edited by S.D. Burley & R.H. Worden, 2003. Reprint Series Volume 4 of the International Association of Sedimentologists. Blackwell Publishing Ltd, 108 Cowley Road, Oxford OX4 1JF, UK; 649 pages, paperback; £ 60.00; ISBN 1-40510-897-5.

In the past 30 years or so, a considerable number of articles on diagenetic processes in ancient and recent sediments appeared in the journal *Sedimentology*. From this source, a selection of 38 key papers on the subject has been brought together in the present work, which opens with an Introduction and closes with an Index of 11 pages.

In the lengthy introductory article, the editors elaborate on the concept of diagenesis and present a broad and well-considered overview of the processes and conditions involved. The primary objective of their contribution is to provide a framework for the papers compiled in the book. Accordingly, the authors distinguish three regimes that relate diagenetic processes to the evolution of sedimentary basins, viz. (i) Eogenesis (early, depositional-environment-related diagenesis), (ii) Mesogenesis (burial diagenesis) and (iii) Telogenesis (uplift and exposure-related diagenesis). On the basis of a further subdivision accounting for climate and mineralogical composition, the papers are grouped with each thematic group being preceded by a brief introductory text.

Just how expedient is the publication of reprints from a leading journal available in almost all earth-science libraries? My answer would be that, in this particular case, the volume under consideration has focused attention on the remarkable progress made in a particular branch of sedimentology. A combination of petrographical, geochemical and isotopic methods and, to an increasing extent, also the application of modelling techniques has contributed considerably to our insight into diagenetic processes in a basin-history context. As explained by the editors, the body of knowledge on the subject has grown rapidly in the 1980s and 1990s. Amongst other things, this is evidenced by three recent Special Publications of the IAS dealing with carbonate, quartz and clay mineral cements in sandstones, respectively. By the look of it, the crown on all this work would be a classical, comprehensive textbook rendering the principles of the subject matter more accessible to a readership of non-specialist earth scientists and students.

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