

Sedimentary Structures

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Sedimentary structures are important attributes of sedimentary rocks. They occur on the upper and lower surfaces of beds as well as within beds. They can be used to deduce the processes and conditions of deposition, the directions of the currents which deposited the sediments and in areas of folded rocks, the way-up of the strata.

Sedimentary structures are very diverse and many can occur in almost any lithology. Sedimentary structures develop through physical and/or chemical processes before, during and after deposition, and through biogenic processes. It is convenient to recognise five categories of sedimentary structure: erosional, depositional – all sediment types, depositional– especially in limestones, post-depositional/diagenetic and biogenic.

Sedimentary structures have a key role to play in the interpretation of sedimentary processes, which, in turn, provides a starting point for the interpretation of depositional environments and palaeogeographies. We have, therefore, written this work because of the fundamental importance of sedimentary structures to virtually all interpretations of sedimentary rocks and also because they are fascinating and often beautiful features in their own right. Their study brings together diverse aspects of physics, chemistry and biology, often in unexpected and unique ways, and it demands a stimulating combination of observation, imagination and scientific understanding, which can give great intellectual satisfaction to those who enjoy asking questions of the world around them.

References:

- [1] Collinson, J. D., N. Mountney, D. B. Thomson, 2006, Sedimentary Structures, 3rd edition, London, Uk.
- [2] Tucker M. E, 2003, Sedimentary Rocks in the Field, 3rd edition, John Wiley and Sons, Uk.