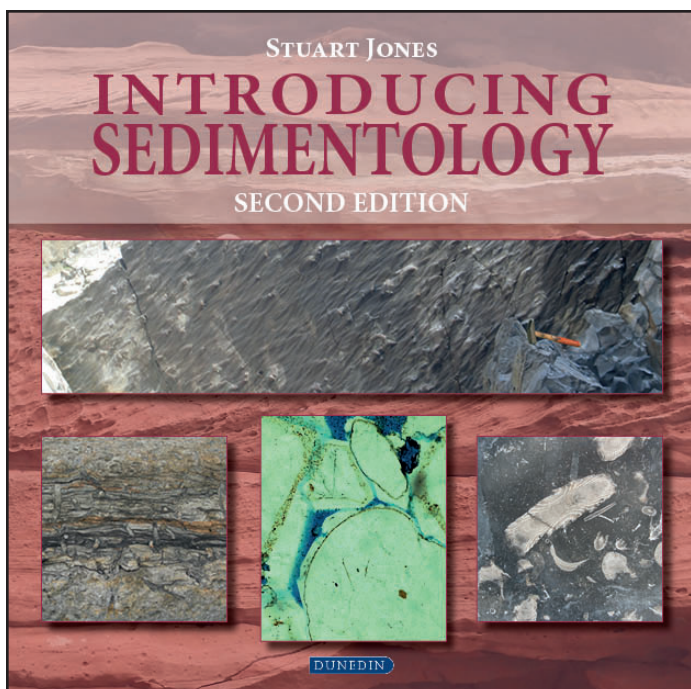


REVIEW



Introducing Sedimentology

Stuart Jones

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Introducing Sedimentology by Stuart Jones offers a look at the evolving fields of sedimentology and stratigraphy, emphasizing their enduring importance in today's world. As we pivot towards renewable energy and decarbonization, the role of sedimentologists becomes increasingly vital. Jones illustrates how sedimentologists are essential not only in traditional areas like hydrocarbon exploration and production, but also in emerging fields such as carbon storage and geothermal energy.

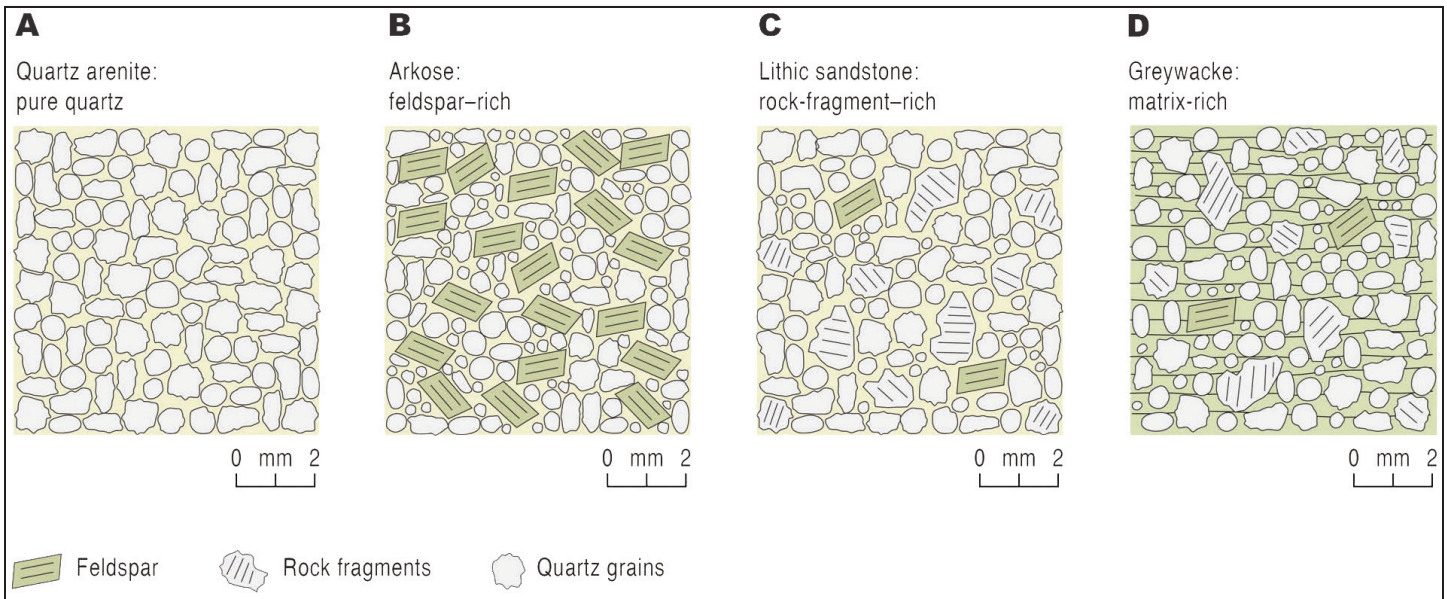
The book serves as a gateway for aspiring sedimentologists, presenting a user-friendly introduction to key concepts like

stratigraphy, sedimentary petrology, sedimentary structures, environments of sedimentation, and fossils. While primarily tailored for introductory courses, the book lays a solid foundation for further exploration, complemented by a valuable glossary for quick reference. Jones balances complexity with accessibility, though some topics like sequence stratigraphy might be too advanced for newcomers. While the text may lack the intricacies required for practical fieldwork, its emphasis on theoretical frameworks and real-world applications instills a sense of curiosity and prepares readers for future endeavors in sedimentological research.

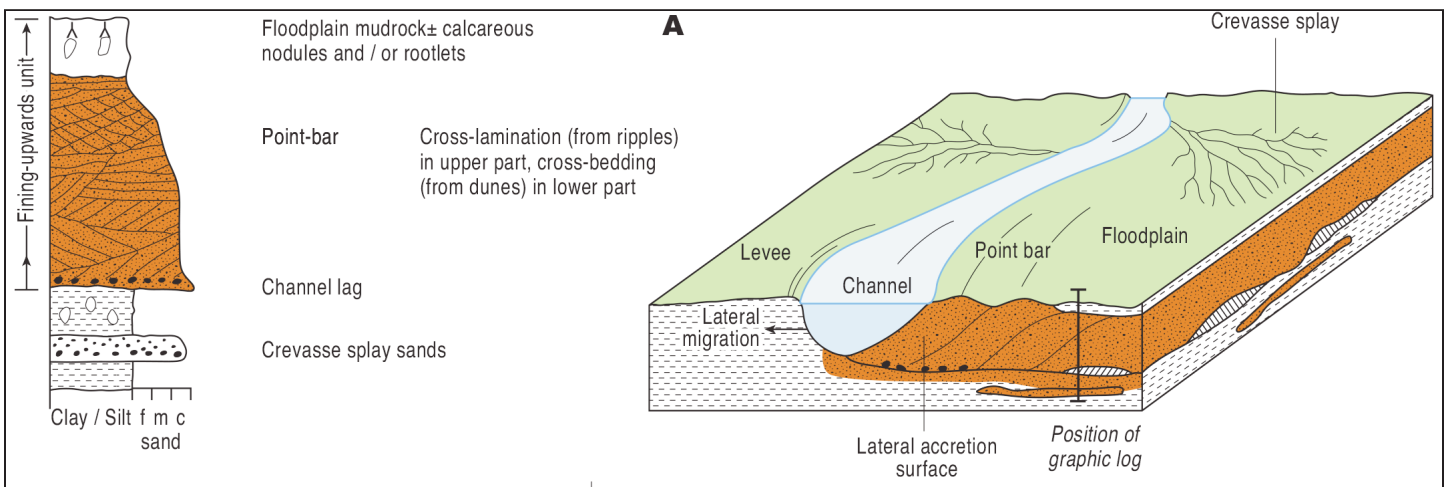
Chapter by chapter, Jones navigates through the sedimentary rock classification, sedimentary processes, environments, fossil analysis, and societal implications, weaving together a narrative that underscores the interdisciplinary nature of sedimentology. By illuminating cutting-edge applications such as dinosaur reconstruction, CO₂ sequestration, and planetary sedimentology, the book ignites passion and fosters a new generation of sedimentological experts poised to tackle the challenges of tomorrow.

Chapter 1 of *Introducing Sedimentology* hits the main points of contemporary sedimentology and stratigraphy, introducing the facies concept, the concept of environments of sedimentation and how these can be interpreted using facies, Walther's Law, the fundamental laws of stratigraphy, unconformities, and types of sedimentary basins. Chapter 2 provides a good foundational background in how sediments and sedimentary rocks are described and classified. The images here are fantastic. The concept of diagenesis is discussed at a level commensurate with the target audience. Chapter 3 sets the stage for how sedimentary structures can inform sedimentologists about how to interpret the conditions of the surface of the ancient Earth, covering the most commonly encountered sedimentary structures, as well as some strange and unusual features in the sedimentary record. Chapter 4 summarizes the range of sedimentary environments in the modern and ancient Earth and on other planets, including continental, shallow marine, and deep marine settings. Chapter 5 provides a good general introduction to the general types of fossils and their use in interpreting and dating sedimentary rocks. Chapter 6 then frames all the concepts previously covered and makes an excellent case for the societal importance and future career opportunities for sedimentologists, including petroleum, geothermal, CO₂ storage, mineral deposits, and common industrial and commercial applications of quarried sediments and sedimentary rocks.

In summary, *Introducing Sedimentology* by Stuart Jones emerges as a compelling invitation into the world of sedimen-



Classification of sandstones based on different types of grains and the occurrence of matrix present between grains.



The subenvironments of a meandering river and graphic log providing a vertical representation of the sedimentary units.



The El Capitan ancient reef. El Capitan is the southern part of the Guadalupe escarpment, an ancient Permian limestone reef that forms the present-day Guadalupe Mountains, Texas, USA.

tology. It is interesting to read, accessible, and very well illustrated. The book includes many excellent images and other graphical material that should prove very useful in the context of teaching. With its engaging and accessible text, rich imagery, and forward-looking perspective, the book is sure to attract potential trainees to the field of sedimentology, ensuring that we have the experts and the expertise needed to face the challenges of today and tomorrow.