

Sedimentary Coastal Zones from High to Low Latitudes: Similarities and Differences

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Sedimentary Coastal Zones from High to Low Latitudes: Similarities and Differences

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Preface

This Special Publication deals mainly with siliciclastic coastal-zone systems developed along low-lying, passive, continental-trailing edges primarily of east Americas. Utilizing comparable systems along a north–south track, the main objective is to examine similarities and differences of coasts of the Arctic/subarctic, temperate zones and subtropics/tropics. This is a timely exercise to report on increasing knowledge lately achieved about the cold regions and, because of the global warming trend, climatic zones are notably migrating Polewards with significant changes occurring everywhere. A few typical coasts of other continents have been utilized to illustrate particular cases such as the Atlantic coast of Portugal, aeolian dunes of South Africa and Australia, the carbonate–evaporite system of the Qatar Peninsula, Persian Gulf, and the complex Mediterranean Sea with stable and tectonically active systems.

The volume is divided into four parts. *Part one* presents worldwide reviews about basic coastal-zone concepts, and comparison between coasts of different climatic zones. Topics and examples are offered of coastal landforms, vegetation, fauna and adaption of inhabitants of various climatic zones. *Part two* presents reviews and novel studies dealing with processes, some greatly influenced by the recent climate warming, and typical features of coastal zones from the High Arctic to the subarctic. *Part three* deals with temperate coastal zones. Major differences occur between paraglacial (formerly glaciated) areas still affected by some post-glacial isostatic rebound and the others, some impacted by increasing frequency of large storms; all highly modified by human activities. *Part four* examines (1) sedimentological methods on how to distinguish between tropical storms and

tsunamis, (2) the muddy shores of northeastern shores of South America, and (3) an evaporite/carbonate coast of the Persian Gulf.

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The editors