

This compilation is unique because it makes available a vast amount of updated basic geological data of an important sequence of rocks from a very critical period of the geological past. For Indian geologists who are concerned with the Late Precambrian rocks in the Himalayan terranes or in the Purana basins, it is an invaluable reference book and provides several significant and comparable situations which could be tested in the Indian context.

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THE APPALACHIAN—OUACHITA OROGEN IN THE UNITED STATES.

Edited by R. D. Hatcher, Jr., W. A. Thomas and G. W. Viele, Published by the Geological Society of America, Boulder, Colorado, USA, 1989, 769 pp. 12 plates.

Geological Society of America launched its 'Geology of North America' series to mark its centennial, as a part of the Decade of North American Geology (DNAG) Project, which is the first-ever integrated effort to provide the state-of-the-art on the geology and geophysics of North America. The volume F-2 of this series deals with the fascinating Appalachian-Ouachita Mountains. This bulky volume along with its companion slipcase containing 12 magnificent maps represents a great slice of the North American earth science epic. This 'most elegant' Palaeozoic orogen 'which humbles a man' has been a cradle for many a geological thought, from the ancient geosynclinal hypothesis of Dana and Hall to the modern plate tectonic paradigm involving thin-skinned thrusts and accretionary terranes.

Hatcher Jr. briefly introduces the orogen along with an index map and an orogenic time table. Repeated Wilson cycles in this orogen are sequentially described in the chapters on the Pre-orogenic terranes, Taconic, Acadian and Alleghanian orogenies and post-Palaeozoic activity from several tectonic domains of the orogen. Chapters on palaeontologic and palaeogeographic reconstructions, geomorphology, geophysics, thermal evolution (based on Ar-Ar geochronology), mineral deposits and energy resources deal with the multi-theme data base of this glorious orogen. Tectonic synthesis by Hatcher Jr. concludes the gripping history of the Appalachians. A similar pattern of treatment is given to the equally important Ouachita orogen, where the special emphasis is on litho- and bio-stratigraphy, sedimentology and structural evolution. There are also chapters on geophysical overview and mineral potential as well as a short epilogue. The concise descriptions, perceptive interpretations, well-drafted text figures and large-size maps are hallmarks of this publication. The great ideas and 'acrimonious controversies' discussed in this volume will find useful application in comparable terrains.

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