

BOOK REVIEWS

(8848 m), the highest peak in the world lies in the central part.

This book consists of 13 chapters. In the first chapter, the author tries to describe the geographic framework and some of the classical works on the Himalayas. Plate 1.1 is absolutely not readable. The second chapter provides a description of the Indo-Gangetic plain from the compilation of ONGC published data. He describes the frontal faults and basement as well as change of course by rivers, which is obviously, a neotectonic phenomenon. The third chapter on the geomorphology of the Himalayas, collects data on the rivers, glaciers, weathering products, etc. Glaciological findings have revealed that glaciations were not synchronous in the Himalayas, but varied between 60 and 18 ka in different regions. The high chemical weathering is related with topography resulting from tectonism and climate. The total carbon dioxide consumption in the Himalayas is four times higher than the Amazon basin. This might influence global climate in the long run². Plates 3.1 to 3.3 are of poor quality. Chapter 4 on structure and tectonics has been compiled using data published in the literature and is not cohesive. Recent work by international researchers is missing. Plates 4.1 and 4.2 are also of poor quality. In chapter 5 the geological map of the Himalaya is not very well printed. Similarly, figures 5.3–5.5 and 5.11 do not serve any purpose. The whole purpose of writing this book is defeated and it is rather annoying for any geologist who would like to learn the science of Himalayan geology!

The next chapter on palaeontology is poorly crafted. The Himalayas are the cradle of classical areas of fossil research – right from the days of Karl Diener³, the famous palaeontologist from

Vienna. References are poorly cited in this chapter. Unfortunately without any plate of vertebrate or invertebrate fauna as well as flora, the chapter is disappointing. The chapter on petrology is disorganized. Description of ultra high pressure metamorphism and the deep-seated phenomenon along the subduction zone is missing. Plates 7.1 to 7.3 are not worth understanding. They should have been properly printed. The chapters on geochronology and geophysical researches are not well tabulated and reproduced. The chapter on environmental geology should have taken seriously the subject of global warming and recession of Himalayan glaciers. The remaining chapters on engineering geology, and resources of Himalayas have been compiled with data from published material in a rather sketchy manner. The final chapter on the origin and evolution of the Himalaya has been compiled from published data and lacks synthesis.

There are numerous quotes from Sanskrit scriptures, which are simply superfluous. In the bibliography there are numerous wrongly quoted literatures and mistakes as well as typographical errors. With the high price tag the publisher should have taken more care to edit the book and reproduced the diagrams properly.

1. Sinha, A. K., *Himalayan Orogen and Global Tectonics*, Oxford & IBH, New Delhi 1992, pp. 3–18.
2. Sarin, M. M., *Curr. Sci.*, 2001, **81**, 1446–1450.
3. Diener, C., *Mem. Geol. Soc. India*, 1912, **36**, 1–175.

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Gemstones – Enchanting Gifts of Nature

The Geological Society of India, Bangalore, has this year in its 'Popularization of Science Series' has brought out a beautifully illustrated book titled *Gemstones – Enchanting Gifts of Nature* by R. V. Karanth, a specialist in the study of gems and a former Professor of Geology at the Maharaja Sayajirao University, Baroda. A gemmologist's delight, the book deals with every possible aspect of gems and furthers the study of gemmology.

There are chapters on what are gemstones, their qualities, colours, rarity, chatoyancy, refractive index, lustre, man-made stones, organic stones, gem-cutting, flaws in gemstones and gem testing, gem carving as well as gem-cutting and jewellery.

The book consists of 48 pages, inclusive of explanatory notes and vivid pictures and is priced at Rs 200.

S.N.