

Satish Kumar and Santosh). The volume concludes with an unrelated paper on evolution of Central Indian craton by Divakara Rao and co-workers.

The field guide describes ten excursion stops chosen on the basis of easy accessibility and availability of good amount of data. Sketch maps with up-to-date descriptions of state-of-the-art laboratory information enhance the value of the field guide, which is perhaps among the best produced in recent years.

The papers are heavily weighted in favour of thermobarometry including recent studies on fluid inclusions and stable isotopes. Geochronology is also a favourite topic. While the enormous output of laboratory data will be useful for interpreting geological evolution of the region, a broad regional map showing tectonic blocks with a brief write up would have provided a good backdrop for discussion. An instructive abstract with each paper will surely have helped a rapid reader, especially in the absence of a well-organized summary. The concluding remarks or summaries given in some papers are so sketchy as to serve the author's only purpose of somehow completing his piece. A large number of papers from Kerala, particularly from Santosh's group may add to the local flavour, but may affect the reach, unless it is more broad based. When we integrate all laboratory data, it may still be necessary to verify them through field relations for which one needs more field work, which does not sadly form a significant part of new research projects.

It is to the credit of the editors and authors that the drawings are neatly and attractively done. Generally, the photographs which substitute for textual description, are not reproduced well enough. Spelling and syntax mistakes could have been reduced by more rigorous proof reading. The reference list is up-to-date, exhaustive and useful to an avid researcher. Addresses of the authors if given in the paper itself would have been very helpful. On the whole it is a

valuable compilation, useful for professionals, teachers and students.

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Annual Review of Physiology 1996.
Joseph F. Hoffman, ed. Annual Reviews Inc., 4139 El Camino Way, P.O. Box 10139, Palo Alto, California, 04303-0139, USA. Vol. 58. Price: USA \$ 54, Elsewhere \$ 59. 815 pp.

The Annual Reviews have always been heavy reading. Each volume every year has contained several chapters; each chapter dealing with one particular branch of physiology – respiration, blood, digestion, nervous system, etc. The pattern of presentation is that each chapter is under the charge of a section editor. The section editor then decides on the particular small topic that seems to be of immense current importance in that particular branch of physiology. The current volume concentrates on molecular phenomena that affect the particular branch of physiology that is being reviewed. Thus for example, when the nervous system is being reviewed, in point of fact, the study of one specific ionic channel in the nerve cell membrane is reviewed. The whole volume is devoted to such specific molecular phenomena that are important to the various branches of physiology. Though this is an index of the importance of molecular biology in modern biological thinking, it does tend to give a very lopsided view of the subject concerned.

Given this limitation, one must view this Journal (*Annual Review of Physiology*), as meant for senior researchers, who are already working intensively in the field. Such people will find the annual reviews very useful and the reviews written by very erudite thinkers in the field. This particular issue will be of immense

value to those researchers who concentrate on molecular phenomena. Others will find the volume heavy reading and difficult to digest.

One aspect of the Annual Reviews requires special mention. The first chapter is always written by a senior researcher, who writes an informal biographical chapter, on the particular field that has been his absorbing interest throughout his life. The first chapter should be read by all youngsters (graduate or undergraduate), who intend to devote their lives to academic research. They will find themselves being introduced to the excitement and fascination of science. In this volume, the first chapter is written by H. E. Huxley. This is the man who introduced the concept of the 'sliding filament' in skeletal muscle contraction. He introduces the reader to his desire to study nuclear physics, explains why he became disenchanted with nuclear physics (the use of nuclear bomb in the Second World War), his introduction as a physicist to the study of X-ray diffraction and how he came to use this to define the molecular structure of the contractile elements of skeletal muscle. It exemplifies how a strict physicist can unravel biological secrets and positively direct the thinking of biologists. As far as this volume of the *Annual Review of Physiology* is concerned, this particular chapter by H. E. Huxley focusses the reader's mind onto the need for understanding many biological phenomena at the molecular level.

By and large, this journal contains reference material, useful to the senior researcher. It also contains one chapter that will inspire the youngster. This journal should be stocked by every library that deals with biology. Individuals should only buy those volumes that are of particular interest to them.

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