

in the yeast *S. cerevisiae*. Mutational analysis of the gene coding for calmodulin has led to the identification of several distinct and essential functions of this protein. The cellular functions of Ca²⁺-dependent and Ca²⁺-independent targets of calmodulin are described. It appears that in the budding yeast, the essential functions of calmodulin are performed in its Ca²⁺ free form.

In his elegant review on 'Disseminating the genome: Joining, resolving and separating sister chromatids during mitosis and meiosis', Nasmyth has provided an excellent discussion on the roles of the molecular players involved in the cohesion and subsequent separation of sister chromatids. Isolation of yeast mutants, unable to maintain sister-chromatid cohesion, has led to the identification of several different classes of proteins required for establishing and maintaining cohesion between sister-chromatids. One of these classes contains a four-subunit protein complex, the cohesion complex, that forms the 'glue' between sister-chromatids. Its destruction triggers metaphase to anaphase transition. The review details the identity and functions of mitotic and meiotic cohesions and other proteins required for the establishment, maintenance and destruction of cohesions in yeasts and other systems.

In his review on 'Informed consent and other ethical issues in human population genetics' Henry Greely has pointed out some controversial ethical problems that have been encountered by researchers working on human population genetics. There has been a flurry of activity in this field, with a number of organizations launching projects on collecting genetic data on populations and extended families. The author discusses the main ethical problem – whether the researchers should obtain the informed consent of an individual within a group or of the group as a whole. These and other related issues, such as confidentiality of data, return of information to the population, commercial fallouts and right to use the research data, etc., have been addressed in this review.

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An Introduction to the Mammalian Fauna of the Siwalik System: Biodiversity of the Siwalik Fauna. K. N. Prasad. Prasad Publications, 8, Venkataraman Street, Srinivasa Avenue, RA Puram, Chennai 600 028. 2001. 295 pp. Price: Rs 300.

The pioneering work on the Siwalik stratigraphy and palaeontology was done by British and American workers in the nineteenth and early part of the twentieth centuries. Post-independence geological work in the Siwaliks of India and Pakistan can be grouped in two broad categories. The first category deals with the palaeontological aspects and the second belongs to magnetostratigraphic work, which is mostly clubbed with vertebrate palaeontology. The author K. N. Prasad, has tried to compile all the available information on the Siwalik Group in this book. In the first two chapters various aspects of the Siwalik Group and its relation to the Karewas of Kashmir, Nepal Siwaliks and Quaternary deposits of Peninsular India are discussed. The next 12 chapters deal with various mammalian groups, viz. Primates, Rodentia, Carnivora, Suoidea, Hippopotamoidea, Traguloidea, Giraffoidea, Bovoidea, Equoidea, Rhinoceroidea, Proboscidea and Edentata. The last chapter is devoted to origin, evolution and migration of mammals of India. In the first two chapters, the author has discussed the stratigraphic details, but not the current stratigraphic nomenclature for the Siwalik succession. He has referred the succession to 'System' (cover page), 'Sub-group' (p. 15), 'Group' (pages 15 and 17), 'Super Group' (pages 1, 5, 6 and 10) or 'Super-Group' (p. 10). This is confusing for the general readers. Presently, the Siwalik succession carries the status of 'Group' not only in India and Pakistan, but also in Nepal. American workers combined the vertebrate palaeontological data with magnetostratigraphic data from the Siwaliks of Potwar Plateau and proposed four biostratigraphic interval-zones for the Middle and Upper Siwalik subgroups. Prasad did not mention these. He has given excellent compilation on vertebrate fossils but did not discuss in detail the various combined faunal studies associated with magnetostratigraphy. In India, similar studies were carried out in Jammu, Haritalyengar (Himachal Pradesh) and

Chandigarh regions, but these are not highlighted properly by Prasad. However, he has provided some useful data pertaining to the first and last appearances of selected Siwalik taxa.

Prasad is among the foremost Indian scientists who worked on Siwalik fossils, particularly those belonging to primates. He has systematically provided the latest information regarding the various Siwalik mammalian groups. He has even provided useful information on certain Siwalik genera. Faunal lists of various Siwalik horizons compiled by Prasad will be of great use to future workers. His book will be useful to postgraduate students, as he has provided the basic data on the Siwalik stratigraphy and fauna.

Prasad's book is profusely illustrated. However, most of the diagrams are very clumsy and not up to the mark. Scale or magnification for many figures of fossils is not provided and it is difficult to judge the actual size of bone and teeth elements. All the line diagrams are not original and some are taken from different publications; sources of all illustrations should have been stated. A few diagrams are not properly oriented. These are printed upside down or side ways. General editing of the chapters is not uniform. There are numerous editorial and formatting inconsistencies. In some places genera are printed in italics, but in others they are upright or even given in bold. Prasad has given the classification of Siwalik succession and equated the various Siwalik horizons with marine stages (p. 6). He should have given land mammal ages. A comprehensive list of references is provided at the end, but these are not arranged alphabetically.

Despite the above-mentioned lacunae, the work is informative. There has been a great need for such work on Siwalik faunas as no comprehensive update was available. Prasad's book fills the lacuna partially. The chapters on fossils, which form the major part of the book, are well written and supplemented with illustrations. The author is able to update the Siwalik data to a large extent. I trust the publication will be popular both with the researchers and postgraduate students working on the Siwalik stratigraphy and palaeontology.

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