

1805 for the "acephalous molluscs" *Lingula*, *Orbicula*, and *Terebratula*, and in 1806 Dumeril proposed Brachiopoda as an order of Mollusca. Since then it has been customary to recognize the group either as a class of the Molluscoidea or Tentaculata, having equal status with the Ectoprocta and Phoronida, or latterly as a distinct phylum. From a paleontological point of view the promotion of the Brachiopoda to a phylum is taxonomically more realistic because the group, which includes some of the oldest fossils, has always been decisively different from other invertebrates.

This group of animals had a rich and long history and is now in decline. About 70 genera are found in the seas today. The occurrence of living brachiopods in almost every known environment from brackish-water tidal flats to abyssal regions over 5,000 m. deep is undoubtedly a relic of past adaptability. Fossil species of their dominant and diverse ancestors are available in every continent.

Brachiopod fossils attracted attention even in the Middle Ages, and from the late 16th century onward they were regularly figured by naturalists under a variety of names. Despite the familiarity with brachiopod shells the practice of indiscriminately grouping all the bivalves together prevailed until the close of the 18th century. During the 19th century many aspects of brachiopod organization and history were rewardingly explored. Till now about 1,700 brachiopod genera have been described, and the tempo of current research is such that this number is likely to increase substantially during the next decade or so.

Still it must be said that this revival of interest in the study of brachiopods is only of recent origin. As mentioned earlier, living

brachiopods are comparatively rare and insignificant members of the faunas of the present day, and their study was therefore neglected by zoologists early in the present century. As yet little is known about their nervous and circulatory systems, especially of articulates, while many basic histological and physiological problems, as for example shell growth, are yet to be resolved. Information on the relationship between the living brachiopod and its environment is still scanty. Much more reliable data are required even on such elementary aspects of brachiopod life as feeding habits, respiration, and population distributions and structures before most of the fossil evidence can be interpreted with any confidence.

In this context the publication of Part H on *Brachiopoda of the Treatise on Invertebrate Paleontology* will be warmly welcomed by paleontologists as a most significant addition to the literature on the subject. They owe a debt of gratitude to the Editor, and to Prof. Alwyn Williams and Prof. A. J. Rowell, the chief contributors, and their colleagues whose efforts have made it possible to bring out the twin volumes.

The first 250 pages give a general account of brachiopods under the following heads: Introduction; Brachiopod Anatomy; Morphology; Composition of Brachiopod Shell; Evolution and Phylogeny; Ecology and Paleocology; Classification; Stratigraphic Distribution; Techniques for Preparation of Fossil and Living Brachiopods. The remaining pages of Volume 1 and the whole of Volume 2 are devoted to Systematic Descriptions. These include diagnosis of nearly 1,700 genera assembled in 202 families, 48 superfamilies, 11 orders, and 2 classes.

THE INDIAN ACADEMY OF SCIENCES: THIRTY-SECOND ANNUAL MEETING

THE Thirty-second Annual Meeting of the Indian Academy of Sciences will be held at Madurai, South India, under the auspices of the Madurai University, on the 20th, 21st and 22nd December 1966.

Sir C. V. Raman, President of the Academy, will deliver the Presidential Address on "The Eye and Vision".

In the Scientific Meeting in Section A, under the Chairmanship of Dr. K. R. Ramanathan, there will be a symposium on "Active Solar Regions". The participants will include Dr. Vikram A. Sarabhai, Dr. M. K. Vainu

Bappu, Dr. R. R. Daniel and Dr. A. P. Mitra.

In a meeting of the Section B, Chairman Dr. N. K. Panikkar will give an address on "New Perspective in Brackish-water Biology". A symposium in this section on "Molecular Biology" will be led by Prof. G. N. Ramachandran on "Conformation of Proteins and Polypeptides". Prof. T. S. Sadasivan, Chairman of the second session in Section B, will give an address on "Physiology of Plants under Stress".

Public lectures will be given by Dr. S. Bhagavantam on "The Atomic Nucleus", and by Dr. Jacob Chandy on "The Human Brain".