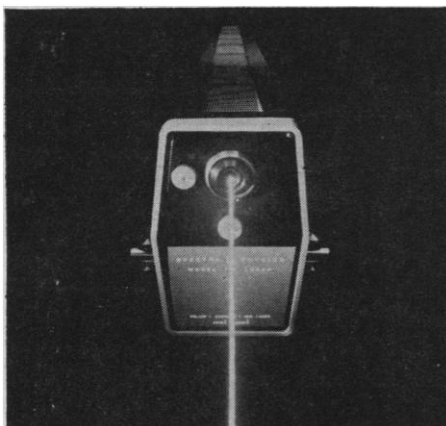




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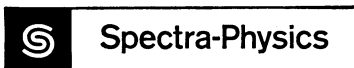
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MEETINGS

North American Paleontological Convention

Paleontology deals with dead organisms, but it is far from being a dead science. The liveliness of the profession was demonstrated at the North American Paleontological Convention, 5-7 September 1969, in Chicago. There are estimated to be about 1500 paleontologists in this hemisphere; more than one-third of them attended these meetings to hear 80 papers and to exchange information directly with their colleagues.

The convention was held at the Field Museum of Natural History; it was a joint venture of the Paleontological Society, Society of Economic Paleontologists and Mineralogists, Society of Vertebrate Paleontologists, Paleobotanical Section of the Botanical Society of America, and American Association of Stratigraphic Palynologists. This was the first profession-wide meeting to be held in at least four decades.

The subject matter of paleontology overlaps the disciplinary boundaries of both biology and geology, exchanging concepts and data with each. However, with biology moving toward the molecular level and geology toward geophysics, the paleontologist at national meetings has been in the position of the man tied between two Roman chariots; he may not be torn to bits, but he certainly feels uncomfortable from time to time.

Even though the students of fossils chose to meet apart from their allied scientists, they still recognized their allegiances by beginning with a convention-wide symposium concerned with various philosophies of correlation of rocks by their enclosed fossils (organized by R. H. Tedford, American Museum of Natural History) and closed with a comparable symposium inquiring into the evolution of the major biologic categories, from early algae to the vertebrates (Nicholas Hotton III, National Museum of Natural History). The tone for this last session was set, in part, by the banquet address of Philip Abelson (Carnegie Institution of Washington, Geophysical Laboratory) on evolution of proteins.

The perennial subject of reefs was discussed, and new interpretations were derived, both from the standpoint of the organisms that help to build reefs (Norman D. Newell, American Muse-

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um of Natural History) and changes in the reef community through time (J. Keith Rigby, Brigham Young University). The general topic of overall community evolution was also considered (Leigh Van Valen, University of Chicago).

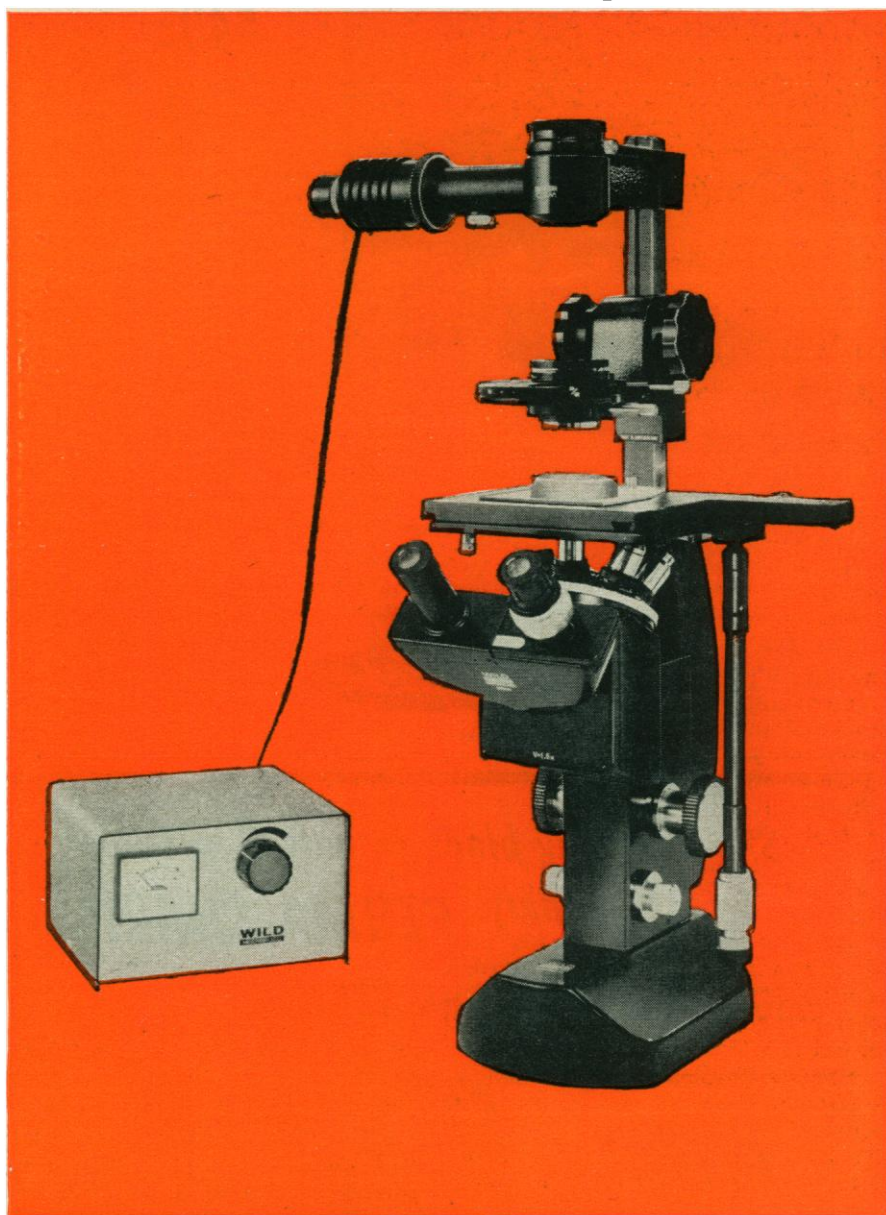
In the past decade, the study of nanoplankton has undergone an explosive development, comparable to that of the Foraminifera in the 1920's when these organisms came to be recognized as economically important. This growing field was surveyed in one symposium on the organic-walled forms (A. R. Loeblich, Jr., Chevron Oil Field Research Company) and in another on the calcareous and siliceous organisms (Helen N. Tappan, University of California at Los Angeles). Larger organisms and a more geochemical approach were evident in a session on phosphate in fossils (Charles W. Collinson, Illinois Geological Survey).

As could be predicted, a variety of viewpoints were espoused in a symposium on the genus concept (Thomas W. Amsden, Oklahoma Geological Survey), each speaker being influenced by the peculiarities of the organisms he studied. Similar disagreement characterized a session on teaching of paleontology (Robert M. Linsley, Colgate University) which had been accurately subtitled as a methodological inquiry into the eschewal of pedantical pedagogical approach to obfuscation. This lighthearted touch carried over to the smoker which included nearly 2 hours of reminiscences by senior members of the profession (Harold E. Vokes, Tulane University).

Interdisciplinary mixing of vertebrate and plant evidence was evident in a symposium on late Paleozoic to early Mesozoic climatic change (Stanley J. Olsen, University of Florida). All biotic elements were considered in a survey knowledge of Cretaceous paleogeography (Karl M. Waage, Yale University). The significance of computers was considered—from data storage, through modeling of shapes, to quantification of distribution (David M. Raup, University of Rochester).

A symposium evoking considerable interest was devoted to atypical preservation of fossils (Eugene S. Richardson, Jr., Field Museum of Natural History), whereby the occurrence of soft-bodied organisms was examined. Some half-dozen localities in the world have provided keyholes through which to view the forms that have otherwise not been preserved in the last 600 million years

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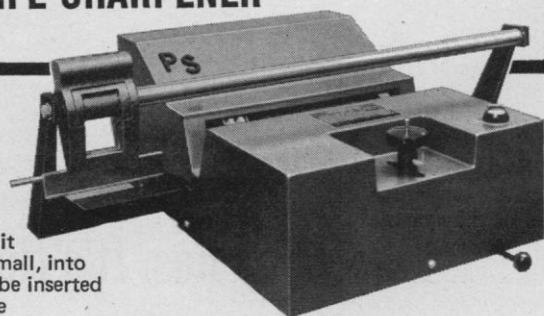
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of earth history. Recent finds of organisms of Pennsylvanian age near Chicago are particularly noteworthy and were featured in a special museum exhibition. Coincidentally, the finding of soft parts of conodonts was reported; small phosphatic toothlike structures have been known since 1856, but their biologic position is enigmatic.

Paleontology is not a science given to spectacular scientific breakthroughs. However, it is a steadily maturing and growing field of inquiry. The North American Paleontological Convention shows the profession to be in a busy, healthy state. Because the meetings provided both a survey of the kind of work pursued and the current state of the numerous activities, plans are under way to publish a number of the symposia in the near future.

ELLIS L. YOCHELSON

*U.S. Geological Survey,
Washington, D.C.*

Courses

Correction: The date for **Electron Microscopy in the Biological Sciences** (see p. 212, 9 Jan.) should have been 9-27 February. The other information remains unchanged.

Fermentation Technology, Cambridge, Mass., 22-26 June. This summer program will emphasize the application of biological and engineering principles to problems involving microbial and biochemical systems, review fundamentals, and provide an up-to-date account of current knowledge in fermentation technology. *Deadline for applications:* 15 May. (Director of Summer Sessions, Massachusetts Institute of Technology, Cambridge 02139)

Training in Nuclear Materials Safeguards, Argonne, Ill., 30 March-22 May. The program for assuming responsibilities in safeguards and nuclear materials management is being offered in four segments, although designed as a unit. Individuals may enroll for one or more segments, but all should attend the final workshop week. Introduction to Nuclear Technology, 30 March-10 April; Measurements in Nuclear Materials Safeguards, 13 April-1 May; Fundamentals of Nuclear Materials Control, 4-15 May; and Workshop in Safeguards, 18-22 May. The fees are \$150 per week. (Dr. Manuel A. Kanter, Safeguards Training Program, Argonne Center for Educational Affairs, Argonne, Ill. 60439)

Organic Mass Spectrometry, St. Louis, Mo., 2-5 March. The main subject areas are basic aspects of mass spectrometry instrumentation, interpretation of the mass spectrum, high-resolution techniques, combined gas chromatography mass spectrometry, and computer processing of mass spectral data. (Dr. Ram L. Levy, Division of Continuing Professional Education, Washington University, Box 1048, St. Louis, Mo. 63130)

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