

REPORT OF THE WORKING GROUP 19 SYMPOSIUM
"MICROPALAEONTOLOGY OF MARINE BOTTOM SEDIMENTS"
CAMBRIDGE, 10-18 SEPTEMBER 1967

The Symposium was held at the Department of Geology, Downing Street, Cambridge. Out of about 125 invited colleagues actively working in this field, some 75 were able to come.

The principal aims of the Symposium were:

1. to improve contact between these micropaleontologists,
2. to discuss new methods e.g. statistics, isotopic approaches, paleomagnetic stratigraphy, scanning electron-microscopy, etc., and new results,
3. to improve systematics, and deep sea stratigraphy, and
4. to make possible exchange of specimens, demonstrations under the microscope, etc.

Altogether 46 hours were spent on lectures by invited specialists and short reports about "New Advances", 12 to 20 hours on Group Discussions and Demonstrations. Informal discussions about methods and some results from USA- and USSR-samples (exchanged and distributed at the Second International Oceanographic Congress, Moscow 1966) were also carried on. Further exchange of micropaleontological material was organized. Accommodating the participants in Harvey Court and bringing them together during meals in Gonville and Caius College Hall, greatly facilitated personal contacts. About 25 microscopes and laboratory facilities were very useful for demonstrations. The lecture hall with projection facilities and the multitone system for simultaneous translations English/Russian and vice versa were technically perfect. The interpreters Helena Kotrchova, Irene Zaiontchec and Alexandre Andreyev did very well in this very specialized field.

Cambridge University Press is prepared to publish the proceedings of the Symposium, ie. the given lectures and manuscripts on which discussions were based. The volume (s) will have some 750 printed pages (illustrations included).

The members of Working Group 19 therefore think that the Symposium was totally successful and wish to express their gratitude to SCOR along with Dr. Wooster, to UNESCO along with Dr. Fedorov and Dr. Hurley - the latter was also able to attend -, to the Royal Society of London and BP London for financing the Multitone system, as well as to the Department of Geology, Cambridge University with Dr. Funnell and his assistants for their effective arrangements.

Working Group 19 regards its functions as having been discharged, with the exception of its responsibility to edit the Symposium Volume, and recommends:

1. that SCOR should consider the possibility of organizing a Second Symposium in the same field before the end of five years.
2. that SCOR should facilitate international collaboration in the study of Quaternary sequences of microfossils in the oceans by recommending to national committees that they

establish post-doctoral fellowships (tenable in their own or another country), for the study of a particular microfossil group in selected cores from the Atlantic, Pacific and Indian Oceans. The best basis for such a study would probably be meridional series of cores, as proposed, for example, by the Soviet Project "M e r i d i a n". For initial study it is envisaged that conventional cores would be provided by one or more institutions. At least part of these investigations by post-doctoral fellows should be carried out at these institutions in collaboration with others.

Recognizing the significance of microfossil studies for deciphering the pre-Quaternary history of the oceans, Working Group 19 also recommends:

3. that SCOR request IUGS to assist in working out an improved general biostratigraphic zonation of the Cretaceous and Cenozoic as a basis for correlation in marine geology.

Small specialist groups should meet to exchange views and research material and, if necessary, carry out joint field and laboratory research with the purpose of,

a. Clarification of zone boundaries and sequences, and

b. Isotopic dating and the application of paleomagnetic data to biostratigraphically zoned sequences of strata.

4. that each oceanographic institution with substantial collections of pre-Quaternary sediments from the sea floor should deposit several large samples (containing both calcareous and siliceous microfossils) of various ages in a few major museums (e.g. British Museum of Natural History, U.S. National Museum and a Museum in the USSR).

Portions of these samples should be distributed to qualified research workers on request, in order to correlate zonations of different types of microfossils.

Professor Dr. Eugen Seibold
Chairman, Working Group 19
Kiel, 29 September 1967