Foreword

In spring of 1976, oceanographers from Belgium, Canada, Denmark, France, the Federal Republic of Germany, the Netherlands, Norway, Sweden, the United Kingdom and the United States of America took part in the Joint North Sea Data Acquisition Programme 1976 (JONSDAP '76).

Patronized by the International Council for the Exploration of the Sea and the Joint North Sea Information System (JONSIS) group, the programme consisted of two components. The first one (FLEX) related plankton dynamics in the area of the Fladen Ground to the various physical, chemical and biological interactions which control its evolution. The other one (INOUT) dealt with the distribution of currents in the North Sea area.

The present report collects most of the contributions which were presented at the final ICES/JONSIS workshop on JONSDAP '76 in Liège, Belgium (April 29th - May 2nd, 1980).

A very large number of data have been shown on the horizontal and vertical distribution and the seasonal evolution of phytoplankton, of zooplankton and its excretion products of different constituents of the organic matter,... One has put forward a certain number of hypotheses to quantitatively explain the ecological interaction mechanisms between these different variables and the exact role played by the marine currents and the deepening of the thermocline on their distribution in time and space.

If it is true that this workshop formally concludes the JONSDAP '76 experiment, it is also evident that the quality and the quantity of the data which

have been collected on this occasion and the fundamental questions that their interpretation did not fail to raise will continue, in the near future, to be the subject of many interdisciplinary works and publications.

In behalf of all participants to the final ICES/JONSIS workshop on JONSDAP '76, the editor hereby wishes to thank the Belgian Ministry for Science Policy for sponsoring the organization of the meeting and the publication of the proceedings.

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