

Report
of
the Sub-Committee on Chemical Analysis of Sea Water,
1 9 6 8

The activity of the Sub-Committee has been focussed on the following items:

- i) collection, compilation and editing of the results of the recent intercalibration trials;
 - ii) stimulation of work on the analysis of the nitrogen compounds in sea water and on storage of sea water samples for analysis of nutrients;
 - iii) preparation of the international training course for the chemical analysis of sea water at Dröbak (Oslo);
 - iv) discussion of the work concerning the solubility of oxygen in sea water;
 - v) preparation of a manual for the chemical work during the International Baltic Year 1969/70;
 - vi) further intercalibration meetings.
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- i) All the results, as compiled by the different authors, have been collected in Kiel. The contributions were edited by Dr. Gieskes and Mrs. Gieskes, and new figures were drawn to provide the same manner of presentation of the results. The manuscript of 115 pages and 16 Figures has been sent to the UNESCO Bureau in Paris, and will be published as an UNESCO Technical Paper. Following the recommendations of the Vth Conference of Baltic Oceanographers a copy of the English version has been sent to Leningrad for translation into Russian.
 - ii) Taking into account the unsatisfactory experience at the recent intercalibration exercises in respect of the nitrogen compounds, the Sub-Committee has encouraged work on the analysis of these compounds. Several laboratories have done work in this field. Some of the results will be presented in the second issue of the "Interlaboratory Report".
 - iii) A meeting has been arranged for the preparation of a draft programme of the ICES/UNESCO course in hydrochemistry, which will be given in August 1969 at the Marine Biological Station in Dröbak (Oslo).

The draft programme will be discussed in the Sub-Committee and the final programme will be presented to the Council after this meeting.

- iv) Because new independent work has been carried out at the University of Liverpool on the solubility of oxygen in sea water, it has been decided to postpone the publishing of the new tables for oxygen saturation values in sea water. The new determinations differ slightly from the previous determinations by Green, which should - according to Council Resolution 1967/4:5 - serve as the basis for the new tables. The problem will be discussed during the meeting so as to find out how to proceed.
- v) A manual for the chemical methods to be used during the International Baltic Year is in preparation at Gothenburg. This manual should serve as a tool to ensure comparability of the chemical data of the investigations, which will last over a period of $1\frac{1}{2}$ years. The participants in the programme are, therefore, urged to use this manual.
- iv) Another ad hoc intercalibration exercise has been carried out during the VIth Conference of the Baltic Oceanographers at Gdynia in June 1968. The Institutes at Gdynia, Helsinki, and Kiel compared their methods for nutrient analysis. The results have been exchanged. Again the analysis of the nitrogen compounds showed a fairly large discrepancy, but for the other components good agreement was obtained, especially as regards the standards.

For the Sub-Committee on the
Chemical Analysis of Sea Water

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