# MARINE SCIENCE

## Symposium, 27-28 December 1967, AAAS Annual Meeting, New York City

## Arranged by

Arthur E. Maxwell (Woods Hole Oceanographic Institution) Edward Wenk, Jr. (National Council on Marine Resources and Engineering Development)

#### 27 December

### Marine Science Affairs— Policies and Concepts

Edward Wenk, Jr.: Chairman.

Robert Frosch (Assistant Secretary of the Navy, Research and Development), *National Security*.

Stanley Cain (U.S. Department of the Interior), Multiple Uses of the Shoreline and Continental Shelf.

Robert White (Environmental Science Services Administration), Ocean Exploration and Environmental Services.

Herman Pollack (Department of State), International Affairs.

## National Programs—A Look Toward the Future

I. E. Wallen (Office of Oceanography, Smithsonian Institution), *Chairman*.

Robert Abel (National Science Foundation), *Research and Education*.

John Craven (U.S. Navy), Deep Sea Engineering Program.

Eugene E. Aubert (Travelers Research Center), *Environmental Prediction Program*.

Charles Drake (Lamont Geological Observatory), *Deep Ocean Sampling Program*.

#### 28 December

## Frontiers of Marine Sciences

Hugh McLellan (National Council on Marine Resources and Engineering Development), *Chairman*.

Nicholas P. Fofonoff (Woods Hole

Oceanographic Institution), Ocean Variability—Atlantic.

John Isaacs (Scripps Institution of Oceanography), Ocean Variability—Pacific.

Frederick Vine (Princeton University), *Mid-Ocean Rises and Ridges*.

J. Lamar Worzel (Lamont Geological Observatory), *Mid-Ocean Rises and Ridges*.

#### Food from the Sea

H. Burr Steinbach (Marine Biological Laboratory, Woods Hole), *Chairman*.

Milner Schaefer (U.S. Department of the Interior), *Fisheries Productivity*.

G. K. Parman (Agency for International Development), *Federal Initiatives*.

John Ryther (Woods Hole Oceanographic Institution), Aquiculture.

Donald Snyder (Bureau of Commercial Fisheries), Fish Protein Concentrate.

The symposium on Marine Science will present a current picture of the diverse activities taking place in this rapidly growing area of science. The first session will be concerned with some of the policies and concepts being discussed within the federal government. Representatives of several of the agencies having major programs in this field will discuss areas to which particular attention is being given, each of which is of prime importance in the national oceanographic program now being formulated. The next session will look at some programs that are developing on a national basis. Education, engineering, prediction, and deep-sea drilling promise to have a significant impact on the future of marine science in this country.

There will be a session devoted to two research programs that have captured the imagination of many marine scientists: ocean variability and the hypothesis of sea floor spreading. Most of the historical work in oceanography has been directed toward the determination of what one might call an average picture of the ocean. We have now reached a stage where our present knowledge and technology allow us to look into the deviations from this average condition, and results of this work are proving to be extremely interesting. The sea floor spreading hypothesis is based on the results of many different observations that have been made on the midocean rises and ridges. As is often the case, these results are open to different interpretations and arguments, both for and against sea floor spreading, will be presented.

The last session concerns the possibility of using the living resources of the sea to provide protein-rich food for the undernourished areas of the world. Federal programs that are being initiated in this area will be discussed along with potentialities and limitations of this resource.

ARTHUR E. MAXWELL Woods Hole Oceanographic Institution, Woods Hole, Massachusetts

See Science, 22 September 1967, for details about registration and hotel reservations for the AAAS Annual Meeting. Additional reports on events or symposia taking place during the AAAS Annual Meeting appear in the following issues of Science: 22 September, "Evolution of the Earth's Atmosphere"; 29 September, "Terrestrial Adaptation in Crustacea"; 6 October, "Behavioral Research—New York Zoological Park"; 13 October, "Weather Modification"; 20 October, "Hazards of Iodine-131 Fallout in Utah"; 27 October, "New York Botanical Garden—Research and Education"; 3 November, "New York Aquarium and Osborn Laboratories of Marine Sciences"; and 10 November, "Psychoanalytic Studies in Child Development" and "Adhesion in Biological Systems."