ECONOMIC DEVELOPMENT AND PROGRESS IN OCEANOGRAPHY: A BIBLIOGRAPHY

Prepared for
OCEAN SCIENCE CENTER OF THE ATLANTIC COMMISSION

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Atlanta, Georgia
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ECONOMIC DEVELOPMENT AND PROGRESS IN OCEANOGRAPHY: A BIBLIOGRAPHY

Oceanography is an extremely broad field of study, incorporating parts of many disciplines within the framework of its definition. As a scientific field of study, oceanography is divided into four basic categories: (1) physical oceanography, the study of waves, currents and tides; (2) chemical oceanography, the study of chemicals found in the sea and its environs; (3) marine biology, the study of the animals and plants of the ocean; and (4) marine geology, the study of land formations on the ocean bottom. Clearly, it would take many volumes to compile a bibliography on all aspects of oceanography. The scope of this bibliography, therefore, is relatively modest, although it does encompass considerable literature. This bibliography is intended primarily to provide background information concerning recent developments in the oceanographic field for IDD staff members in their research into the expected economic impact of the Ocean Science Center of the Atlantic (OSCA) at Skidaway Island (Project A-1082). (It may also serve as a basis for the later acquisition of oceanographic materials by OSCA and the Skidaway Institute of Oceanography.) Consequently, the citations included herein are concerned more with the economic potential and development of oceanography rather than with purely scientific studies.

One important exception to the subject matter limitations of this bibliography, as described above, should be mentioned; Section I is devoted entirely to sources of information in the oceanographic field. This section will enable users to go far beyond the time and subject limitations of this bibliography in their search for information. Section I has three parts: Part A deals with various kinds of reference works, e.g., directories, bibliographic tools, encyclopedias; Part B lists the journals and magazines available in the oceanographic field; and Part C provides a list of the most recent books on oceanography, arranged according to the four areas of oceanographic study mentioned at the beginning of the introduction. No book on this list was published prior to 1960 and most have been published since 1963. As of this writing, all books listed are currently in print.

Beginning with Section II, however, the remainder of the bibliography deals, directly and indirectly, with the economic development and progress of oceanography. References in these sections include magazine and journal articles, books, reports, and pamphlets. An asterisk has been placed next to all books and reports listed in Sections II through VIII. This will enable the user to identify this kind of material with relative ease among the mass of journal articles. A special characteristic of Section II, "Economic Exploitation of the Oceans," should be noted. With the exception of Part A, all other parts (B through G) deal with individual areas having potential economic importance. Part A, however, includes citations which survey many of the areas having economic potential. Therefore, users should also consult Part A for additional information on any of the individual fields discussed in Parts B through G.
A total of 13 indexes* plus a number of other specialized reference sources were searched in compiling this bibliography. All indexes were checked systematically, beginning with the latest issue available as of May 1968, back through January 1965 and, in some instances, slightly further. Initially such terms as "oceanography," "ocean," and "oceanographic research" were checked in each index in the search for appropriate citations. However, because of the broad nature of oceanography, the compiler found it necessary to check more specific headings also. For example, it was necessary to scan such headings as "desalination," "offshore oil," and "water pollution" to ensure their adequate coverage.

To avoid excessive length, this bibliography had to be selective. All references that were not in English were automatically excluded from consideration. In addition, a serious attempt has been made to present only those citations that treated their subject in some depth or otherwise seemed too important to omit. As a rule, news-type articles ranging from one to several paragraphs in length generally were not included. Therefore, while no claim of 100% coverage is made, it is felt that most important articles and publications covering the areas of oceanography with which this bibliography is concerned have been cited.

I. SOURCES OF INFORMATION

A. General Reference Works

1. Bibliographies

a. Abstracts and Indexes


Oceanic Research Institute. Oceanic Index Citation Journal. 1968. Monthly. $45 (for six-month subscription starting January 1968). Oceanic Research Institute, 6811 La Jolla Boulevard, La Jolla, California 92037.

Oceanic Research Institute. Oceanic Index Citation Journal & Indexes. 1964. Annually. $375 ($300 for non-profit organizations). Oceanic Research Institute, 6811 La Jolla Boulevard, La Jolla, California 92037.

b. General Bibliographies


* The date listed for any serial publication is the year that it was established.
2. Dictionaries


3. Directories


National Academy of Sciences. National Research Council. Oceanography Information Sources. For complete citation see Section 1, "Bibliographies."

Naval Oceanographic Office. Glossary of Oceanographic Terms (includes list of oceanographic institutions, agencies, activities, and groups). For complete citation see Section 2, "Dictionaries."

Tysser, Harry F., ed. Fisheries Year Book and Directory 1966-67. For complete citation see Section 5, "Yearbooks."

4. Encyclopedias


5. Yearbooks


Industrial Research, Inc. Oceanology International Yearbook/Directory Issue. Published annually. 1966 to date. For complete citation see Section 3, "Directories."


B. Serial Publications

1. Scientific Journals and Institute Bulletins

Academy of the Sciences of the U.S.S.R. *Oceanology*.


*Deep-Sea Research and Oceanographic Abstracts*. For complete citation see Part A, "General Reference Works," Section 1, "Bibliographies."


Journal du Conseil. (Text in English and French.) 1926. Three times a year. 60 kroner. Bureau du Conseil International pour l'Exploration de la Mer, Charlottenlund Slot, Charlottenlund, Denmark.

Journal of Marine Research. 1937. Three times a year. $15. Sears Foundation for Marine Research, Box 2025, Yale Station, New Haven, Conn. 06520.


Maritimes. Quarterly. Free (limited distribution). University of Rhode Island, Graduate School of Oceanography, Wakefield, Rhode Island 02881.


Texas. Agricultural and Mechanical University. Department of Oceanography and Meteorology. Contributions. 1950. Irregular. (Available on exchange.) Department of Oceanography and Meteorology, Texas A & M University, College Station, Texas.


2. Newsletters and Trade Magazines


C. Books

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Stewart, Harris B., Jr. Deep Challenge. D. Van Nostrand

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2. Chemical Oceanography


3. Physical Oceanography

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Von Arx, William S. Introduction to Physical Oceanography.
$12.75.

4. Marine Biology

Barnes, Harold, ed. Some Contemporary Studies in Marine Biology.

Berrill, Norman J. Life of the Ocean. McGraw-Hill, New York,
1966. $4.95.

Study of Life in the Sea. Holt, Rinehart, and Winston,

Cousteau, Jacques-Yves, and James Dugan. Living Sea. Harper
& Row, New York, 1963. $6.95.

Idyll, C. P. Abyss: The Deep Sea and the Creatures That Live


5. Marine Geology


II. ECONOMIC EXPLOITATION OF THE OCEANS

A. General Survey

"Aerospace Industry and the Oceans: Special Report."  
_Aerospace Technology_, Vol. 21, September 25, 1967, pp. 30-84.

Ardman, Harvey. "Oceanography: A World of Plenty."  


Barnes, S. "Off-the-Shelf Oceanography."  

Berkwitt, G. "Profits Under the Sea."  

"Big Wet-Space Scramble."  

"Billions in the Ocean; with Data on Leading Companies Involved in Oceanographic Research."  

Boehm, George A. W. "Inexhaustible Riches from the Sea."  

"Business Takes the Deep Plunge."  
_Business Week_, June 17, 1967, pp. 74-76.

Chapman, W. M. "Bank of the World's Fertility."  

Clark, John W. "Structure and Probable Growth of the Oceanic Business."  

Clotworthy, John H. "The Role of the Industry in Ocean Science and Technology."  

Danilov, Victor J. "The Oceanic Market: Today and Tomorrow."  

"Dollar Benefits of Oceanographic Research."  
_Undersea Technology_, Vol. 5, December 1964, pp. 15+.

Eberhardt, R. L., and others. "Oceanography."  

"Exploiting the Oceans."  

Fye, Paul M. "The Economic Potential of the Oceans."  
_Industry_, Vol. 31, August 1966, pp. 11+.


"Maturing Infant (Oceanology)." Industrial Research, Vol. 9, April 1967, pp. 43-44.


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B. Aquaculture


Richardson, I. D. "Which Fish to Farm?" Hydrospace, Vol. 1, November 1967, pp. 72-76.


C. Desalination


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D. Minerals and Mining


E. Offshore Oil


"Offshore May Hold 15% of Reserves." Oil and Gas Journal, Vol. 64, July 4, 1966, pp. 54-55.


F. Pharmacology


G. Water Pollution


III. POLITICAL AND PLANNING ASPECTS OF OCEANOGRAPHY

A. International


B. National


"Sierra Club Director F. Eissler Urges Undersea Wilderness Be Preserved as Are Parks and Other Preserves; Seeks Support of Bill to Establish National System of Marine Sanctuaries in Selected Areas of Publicly Owned Coastal Waters." New York Times, August 20, 1967, p. 77, column 1.


C. State and Regional


*Florida Council of 100. Oceanography in Florida. Florida Council of 100, P. O. Box 2192, Tampa, Florida 33601. $1.00.


IV. EDUCATIONAL AND OCCUPATIONAL ASPECTS OF OCEANOGRAPHY


V. MILITARY ASPECTS OF OCEANOGRAPHY


VI. OCEANOGRAPHIC TECHNOLOGY AND EQUIPMENT

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VII. MAN-IN-THE-SEA


VIII. OCEAN ENGINEERING


*American Society of Civil Engineers. Civil Engineering in the Oceans. Abstracts of the ASCE Conference held in San Francisco, California, September 6-8, 1967. 106 pp.


