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NEWSLETTER of the COMMISSION of OCEANOGRAPHY

DIVISION of HISTORY of SCIENCE

INTERNATIONAL UNION of the HISTORY and PHILOSOPHY of SCIENCE

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## DIVISION of HISTORY of SCIENCE

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Would you kindly send comments on the Newsletter, suggestions for improving it and information to be included in the next issue to my attention? With my thanks.

Jacqueline Carpine-Lancre

The Commission is preparing a Directory of Persons interested in the History of Oceanography. If you want to be listed in this Directory and if you did not receive the corresponding questionnaire, please ask me for a copy of it.

J. C.-L.

## E D I T O R I A L

Twenty seven years ago, in August 1962, the General Assembly of the International Union of the History and Philosophy of Science (IUHPS) was held in Ithaca (USA). With the backing of the late Professor Georges Petit I suggested the organization of an international symposium on the history of marine biological laboratories and scientific marine expeditions. This idea was accepted and the symposium took place in September 1963 at the Laboratoire Arago of Paris University, in Banyuls-sur-Mer (France). Participants came from fourteen countries. Its proceedings were published in 1965 with the financial help of UNESCO.

One of the participants, the late Excellency A. Crovetto, representing the Principality of Monaco, suggested afterwards that an international congress of history of oceanography should be organized at the Musée océanographique in Monaco in 1966 and he conferred upon me the responsibility of its scientific organization as Secretary General. This Congress took place in December 1966 and was a great success. Owing to Madame J. Carpine-Lancre, the proceedings of this first Congress were beautifully published in 1968 in 3 volumes. The Congress in Monaco was followed by three others : Edinburgh (1972), Woods Hole (1980) and Hamburg (1987).

Meanwhile it had been proposed by the delegation of Monaco at the 12th International Congress of History of Science (Paris, 1968), that a Commission of the History of Oceanography be created to join the other Commissions of the IUHPS. This Commission was established and its first President was Ingénieur Général hydrographe André Gougenheim (1902-1975) of France. After his passing, I was asked to become President of the Commission, Madame Carpine-Lancre being its Secretary.

The Commission was able to present reports on the activities in the history of oceanography at the International Congresses of History of Science in Bucharest (1981) and Berkeley (1985). To broaden the scope of the Commission, it was decided in 1987, with the agreement of the Secretary General of IUHPS (DHS) (Dr. W. Shea) to enlarge the Bureau of our Commission by the nomination of three Vice-Presidents more deeply involved in oceanography and its history : Mrs Margaret Deacon Seward (Great Britain), Professors Eric L. Mills (Canada) and Luiz Saldanha (Portugal).

It is with their participation and that of other specialists of the history of oceanography that we publish the first issue of our Newsletter. For the present this publication is intended to be a link between colleagues interested in this field of research. Its contents will consist of information on recent publications, work in progress, meetings, congresses, exhibitions, etc.

I wish to thank heartily all those who have contributed to this first issue and especially our Vice-President, Prof. Eric Mills who has compiled a very useful list of source books in the History of Oceanography and has given an account of the seminar on the history of marine stations held in Monaco recently. I thank also the other contributors of this issue : Mrs M. Deacon Seward, one of our Vice-Presidents, Madame J. Carpine-Lancre, our dynamic Secretary, Prof. Luiz Saldanha, also one of our Vice-Presidents, and Drs Anita McConnell and A.L. Rice, who have the honour of being our first authors.

The layout and publication of this first Newsletter were made possible by the great generosity of our colleagues at the International Hydrographic Bureau. We thank them heartily for their interest and assistance.

A last word : I hope that our readers will send us commentaries, suggestions and information for our next issues. Please help us to make the Newsletter a useful link between all those interested in the history of oceanography.

Prof. Jean Théodoridès  
President of the Commission  
of Oceanography, IUHPS (DHS)

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**Project for a Directory of Source Materials  
for the History of Oceanography**

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Source materials for the history of oceanography include documents and written archives, photographs, instruments and apparatus, collections of geological and biological samples and specimens. As these resources, dispersed in various categories of institutions, are difficult to find, a Directory is being compiled which will give locations, type of material held, and accessibility. With the help of an international Working Party, questionnaires were circulated worldwide, to marine laboratories, university departments, museums, libraries and archives, and the replies are now being analysed for eventual publication in the UNESCO Technical Papers in Marine Science series. This Directory is intended to help scientists to find original earlier material appertaining to their present topic or area of enquiry; to improve and extend the primary resources available to historians; and to remind establishments holding this unique material of its value.

## Bibliography of the History of Oceanography

Margaret Deacon

I am at present compiling a critical bibliography of the history of oceanography for publication in the Garland series of bibliographies in the history of science, and would welcome colleagues' help with this project. The aim is to list books, articles etc. which are historical in intent, with scientific papers in which the historical discussion forms a substantial part of the content, rather than original papers contributing to the development of the science. A complete bibliography of the latter would be far beyond the reach of a single volume.

The intention is to draw together in one place references to the considerable body of research which has taken place during the last 20 to 25 years, since the holding of the First International Congress on the History of Oceanography at the Musée océanographique at Monaco in 1966, and its precursor on the history of marine biology at Banyuls in 1963, together with earlier works on the subject. Those earlier contributions were almost entirely the work of scientists but the flowering of interest which has taken place in recent years is more broadly based and historians of science as well as oceanographers have become aware of the importance of the subject and made some significant contributions to it. However, this work has appeared in a variety of ways, in books, monographs, reports and in articles in a great diversity of journals, and none of the periodical bibliographies has up to now been able to cover all potential sources, hence the particular need for a work of this kind.

Even here, however, perhaps surprisingly in a branch of the history of science which many have felt is only now beginning to get its fair share of attention, the number of existing items makes it necessary to be selective. Sheer numbers will likewise make it impossible to include obituaries as a matter of routine, indeed a separate index to biographical notices would be worthwhile publication. From now on, however, with the appearance of this Newsletter, so eagerly awaited, as a vehicle for exchanging information of this kind, the problems outlined above should no longer arise. In the meantime I should be most grateful for help towards making the publication as comprehensive as possible, and if people could send me references to their own historical writings that I might have missed, and, also to articles which they consider important, especially in their own fields or countries, with titles in the original, plus an English translation of the title or indication of the contents, and why it should be included, if possible. All such help will be fully acknowledged.

## A Handlist of Source Books on the History of Oceanography

Eric L. Mills

The reference books and monographs following have been selected to aid teachers and beginning students of the history of oceanography. The list is based on two principles, either that the publications are readily available in major libraries, or that they have not been superseded as sources of information. The periodical literature is not included because of its extent. A good source of information on journal articles published between 1913 and 1975 is the Isis cumulative bibliography (ed. M. Whitrow and J. Neu); it is added to annually by the Critical bibliographies accompanying the journal Isis.

### 1. Basic texts

DEACON, Margaret (1971). - Scientists and the sea 1650-1900, a study of marine science. - London; New York : Academic Press. - XVI-445 p.

McCONNELL, Anita (1982). - No sea too deep. The history of oceanographic instruments. - Bristol : A. Hilger. - IX-162 p.

SCHLEE, Susan (1973). - The edge of an unfamiliar world. A history of oceanography. - New York : E.P. Dutton. - 398 p.

### 2. Symposium and congress proceedings

(1965). Colloque international sur l'histoire de la biologie marine. Les grandes expéditions scientifiques et la création des laboratoires maritimes, Banyuls-sur-Mer, 2-6 septembre 1963. Vie et milieu, supplement 19, 370 p.

(1968). Communications - Premier congrès international d'histoire de l'océanographie, Monaco, 1966. Bulletin de l'Institut océanographique, Monaco, n° spécial 2, 3 vol., XLII-807 p.

(1972). Proceedings - Second International Congress on the History of Oceanography. Challenger expedition centenary; Edinburgh, September 12 to 20, 1972. Proceedings - the Royal Society of Edinburgh, section B (biology), 72, VIII-462 p. ; 73, VIII-435 p.

SEARS, M. & MERRIMAN, D., ed. (1980). - Oceanography : the past. - New York; Heidelberg; Berlin : Springer-Verlag. - XX-812 p.

### 3. Source books

DEACON, G.E.R. & DEACON, Margaret B., ed. (1982). - Modern concepts of oceanography. - Stroudsburg, Pa : Hutchinson Ross. - XIII-385 p. - (Benchmark papers in geology; 61).

DEACON, Margaret B., ed. (1978). - Oceanography, concepts and history. - Stroudsburg, Pa : Dowden, Hutchinson & Ross. - XVII-394 p. - (Benchmark papers in geology; 35).

- IDYLL, C.P., ed. (1969). - The science of the sea. A history of oceanography. New York : T.Y. Crowell. - IX-280 p.
- KOFOID, Charles Atwood (1910). - The biological stations of Europe. Bulletin - United States Bureau of Education, 1910 (4), XIII-360 p.
- McCONNELL, Anita (1981).- Historical instruments in oceanography : background to the oceanography collection at the Science Museum. - London : H.M.S.O. - IV-51 p.  
(see also McCONNELL (1982) in Section 1)
- MURRAY, John (1895). - Historical introduction, in : A summary of the scientific results, first part. Report on the scientific results of the voyage of H.M.S. Challenger during the years 1872-76 : 1-106E.
- MURRAY, John (1912). - A brief historical review of oceanographical investigations, in : The depths of the ocean / John Murray, Johan Hjort : 1-21. - London : Macmillan.
- PAFFEN, K. & KORTUM, G. (1984). - Die Geographie des Meeres. Disziplingeschichtliche Entwicklung seit 1650 und heutiger methodischer Stand. Kieler geographische Schriften, 60, XIV-293 p.
- SCHOTT, Wolfgang (1987). - Early German oceanographic institutions, expeditions and oceanographers. - Hamburg : Deutsches hydrographisches Institut. - 50 p.
- THOMASSON, E.M., ed. (1981). - Study of the sea. The development of marine research under the auspices of the International Council for the Exploration of the Sea. - Farnham : Fishing News Books. - XIV-253 p.
- VAUGHAN, Thomas Wayland & al., ed. (1937). - International aspects of oceanography. Oceanographic data and provisions for oceanographic research. - Washington, D.C. : National Academy of Sciences. - XVII-225 p.

#### 4. Ships and expeditions

- BUEN, Rafael de (1934). - Liste chronologique des croisières océanographiques. - Venezia : C. Ferrari. - 73 p. - (Manuel pour les observations océanographiques à la mer - Commission internationale pour l'exploration scientifique de la mer Méditerranée; 1).
- ESTOK, Rita & BOYKIN, Rosemary E. (1976). - A union list of oceanographic expeditions including results of some major cruise reports. - College Station, Texas : Texas A&M University Libraries. - III-138 p.
- FERRANTE, Ezio (1985). - Crociere e relazioni di viaggio dei marinai italiani nell'ottocento (1861-1900). Rivista marittima, 1985 (6) supplemento, 95 p.
- GUBERLET, Muriel L. (1964). - Explorers of the sea. Famous oceanographic expeditions. - New York : Ronald Press. - V-226 p.
- NELSON, Stewart B. (1971). - Oceanographic ships fore and aft. - Washington, D.C. : Office of the Oceanographer of the Navy. - XVII-240 p.

REINKE-KUNZE, Christine (1986). - Den Meeren auf der Spur. Geschichte und Aufgaben der deutschen Forschungsschiffe. - Herford : Koehler. - 169 p.

RICE, A.L. (1986). - British oceanographic vessels 1800-1950. - London : Ray Society. - 193 p.

Selected references to literature on marine expeditions 1700-1960.- Fisheries-Oceanography library, University of Washington. - Boston, Mass. : G.K. Hall, 1972. - IV-517 p.

WOLFF, Torben (1967). - Danske ekspeditioner på verdenshavene = Danish expeditions on the seven seas. - Copenhagen : Rhodos. - 336 p.

WÜST, G. (1964). - The major deep-sea expeditions and research vessels 1873-1960. A contribution to the history of oceanography. Progress in oceanography, 2 : 1-51.

## 5. Biography and bibliography

HERDMAN, William A. (1923). - Founders of oceanography and their work. An introduction to the science of the sea. - London : E. Arnold. - XII-340 p.

PORTER, Roy (1983). - The earth sciences : an annotated bibliography. - New York; London : Garland. - XIX-192 p.

SARJEANT, W. (1980). - Geologists and the history of geology : an international bibliography from the origins to 1978. - London : Macmillan. - 5 vol.

WATERMANN, B. (1987). - Bibliographie zur Geschichte des deutschen Meeresforschung. Chronologische Titelaufzählung (1557-1986) und Register. - Hamburg : Deutsche Gesellschaft für Meeresforschung. - XIII-198 p.

See also SCHOTT (1987) in Section 3 for biographies.



## Current Bibliography on the History of Oceanography

(1987-1988)

Jacqueline Carpine-Lancre

It is a commonplace to point out the wide scattering of the literature dealing with the history of science; this is particularly justified for the history of oceanography. Until now four current bibliographies might be used to retrieve it :

- Oceanographic Literature Review (part B of Deep-Sea Research), § F.330: History of Science (especially Oceanography);
- Aquatic Sciences & Fisheries Abstracts, §: History and Development;
- Bulletin signalétique, 522 : Histoire des sciences et des techniques, V.B.: Géophysique, océanographie, art de la navigation, § Océanographie;
- Isis (critical bibliography), § HS.23c: Oceanography.

None is fully satisfactory. The scientific bibliographies are not restricted to oceanography (O.L.R.) or to history (A.S.F.A.). The two others include only references on physical oceanography under this heading and split the remaining relevant material under Biology, Zoology, Geology, etc. Moreover, all four give a limited number of references. During the three years 1985-1987, O.L.R. provided 40 references, A.S.F.A 35, Bulletin signalétique 6, and Isis 2...

The documents received in the libraries of the Musée océanographique de Monaco and of the International Hydrographic Bureau are regularly scanned: nearly 1000 new monographs (books, theses, conference proceedings), each year, as well as issues of 1200 serials. Besides the four above-mentioned bibliographies, a dozen more are also scrutinized.

The first list of references from those sources given here includes documents published in 1987 and 1988. Papers with a biographical bias, biographies and obituaries will be gathered in a special list to appear in the next Newsletter.

I would greatly appreciate if you would be so kind as to forward me your comments on this first attempt and to send reprints of your papers (and reviews of your books) to my attention.

I thank you for your help.

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Abstracts of papers and exhibits - 4th International congress on the history of oceanography. - Hamburg : 1987. - 115 p.

ANDERSON, R. Wayne (1987). - "Bait up!": dory fishing on Georges Bank, in : Georges Bank / ed. Richard H. Backus & Donald W. Bourne : 425-427, ill. - Cambridge, Mass.; London : MIT Press.

- ANDRIASHEV, A.P. (1987). - Development of Berg's concept of bipolarity of marine fauna. Marine biology, Vladivostok, 1987 (2) : 60-67 (in Russian).
- = ANDRIYASHEV, A.P. (1987=1988). - Development of L.S. Berg's concept of the bipolarity of marine fauna. Soviet journal of marine biology, 13 (2) : 114-120.
- BARR, William (1987). - Charles Bénard's first expedition to Novaya Zemlya, 1908. Polar record, 23 (146) : 511-529, ill.
- BARTHA, Lajos (1987). - Az első magyar Adria-kutató expedíció. Evforduloink a műzaki és Természettudományokban, 1988 : 67-69, ill. (in Hungarian).  
(The first Hungarian Adria research expedition, 1913).
- BENSON, Keith R. (1987). - H. Newell Martin, W.K. Brooks, and the reformation of American biology. American zoologist, 27 (3) : 759-771.
- BENSON, Keith R. (1988). - Why American marine stations ? : the teaching argument. American zoologist, 28 (1) : 7-14.
- BOEWE, Charles, REYNAUD, Georges & SEATON, Beverly (1987). - Précis ou abrégé des voyages, travaux et recherches de C.S. Rafinesque (1833); the original version of A life of travels (1836). Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, afd. Natuurkunde, (2) 86, 113 p., ill.
- BOURGOIN, Jean (1987). - La carte marine française, de ses débuts à 1800. Bulletin du Comité français de cartographie, 113 : 28-30.
- BOURGOIN, Jean (1987). - Hydrographie et cartographie françaises de 1800 à nos jours. Bulletin du Comité français de cartographie, 113 : 31-41, ill.
- BOURGOIN, Jean (1988). - The French state and nautical cartography. International Hydrographic Review, 65 (2) : 7-16, ill.
- = BOURGOIN, Jean (1988). - L'Etat français et la cartographie marine. Revue hydrographique internationale, 65 (2) : 7-16, ill.
- BRYAN, C.D.B. (1987). - The depths. "These marvelous nether regions", in : The National Geographic Society : 100 years of adventure and discovery : 220-241, ill. - Oxford : Phaidon.
- CARPINE, Christian (1987). - Catalogue des appareils d'océanographie en collection au Musée océanographique de Monaco. 1. Photomètres. 2. Mesureurs de courant. Bulletin de l'Institut océanographique, Monaco, 73 (1437), 144 p., ill.
- CARPINE-LANCRE, Jacqueline (1988). - Le Prince Albert Ier de Monaco et l'alimentation des naufragés en pleine mer. Histoire de la médecine navale et d'outre-mer, séminaires faits au Musée de la Marine, 10, 21 p.
- CLAPP, Pamela L. (1988). - The history of The Biological Bulletin. Biological Bulletin, 174 (1) : 1-3.
- CLOTWORTHY, Jack (1988). - Advanced marine technology division retrospective. Marine Technology Society Journal, 22 (1) : 64-68.
- COX, Graham (1988). - The birth of the marine hobby. Aquarist and pondkeeper, 52 (10) : 17, 19, ill.

- DAVIS, Richard Arnold (1987). - Nautilus studies - the first twenty-two centuries, in : Nautilus, the biology and paleobiology of a living fossil / ed. W. Bruce Saunders & Neil H. Landman : 3-21, ill. - New York; London : Plenum Press. - (Topics in geobiology ; 6).
- DEXTER, Ralph W. (1988). - History of American marine biology and marine biology institutions. Introduction : origins of American marine biology. American zoologist, 28 (1) : 3-6.
- Dumont d'Urville et Arago. - Met-mar, 134 : 28-29, ill. (1987).
- FAUVEL, Y. (1987). - Conchyliculture en Méditerranée... histoire sans marée. - (Brest) : Direction des ressources vivantes, IFREMER. - 161 p., ill.
- GERKING, Shelby D. (1988). - Fishery biology : past, present and future. Fisheries, 13 (1) : 13-17.
- GERMAN, Andrew W. (1987). - History of the early fisheries : 1720-1930, in : Georges Bank / ed. Richard H. Backus & Donald W. Bourne : 409-424, ill. - Cambridge, Mass.; London : MIT Press.
- GOLDSMITH, R.A. & RICHARDSON, P.L. (1987). - Reconstructing Columbus's first transatlantic track and landfall using climatological winds and currents. Technical report - Woods Hole Oceanographic Institution, 87-46, IV-51 p., ill.
- GROOT, S.J. de (1988). - Een eeuw visserijonderzoek in Nederland 1888-1988. - IJmuiden : Rijksinstituut voor visserijonderzoek. - 252 p., ill.
- HEADRICK, Daniel R. (1988). - The Imperial telecommunications networks, in : The tentacles of progress: technology transfer in the age of imperialism, 1850-1940 : 97-144. - New York; Oxford : Oxford University Press.
- HENNEMUTH, Richard C. & ROCKWELL, Susan (1987). - History of fisheries conservation and management, in : Georges Bank / ed. Richard H. Backus & Donald W. Bourne : 430-446, ill. - Cambridge, Mass.; London : MIT Press.
- "History of American marine biology and marine biology institutions", symposium presented at the Annual Meeting of the American Society of Zoologists, 27-30 December 1986, at Nashville, Tennessee. American zoologist, 28 (1) : 3-34.
- HOLLAND, Clive & SAVELLE, James M. (1987). - My dear Beaufort : a personal letter from John Ross's Arctic Expedition of 1829-33. Arctic, 40 (1) : 66-77, ill.
- KAGEYAMA, Noboru (1987). - A study of the process of the historical development of fisheries education in early Meiji Japan. Report of the Tokyo University of Fisheries, 22 : 1-30. (in Japanese with an English abstract).
- KING, Lauriston R. & JENNINGS, Feenan D. (1988). - The executive and the oceans : three decades of United States marine policy. Marine Technology Society Journal, 22 (1) : 17-32, ill.
- KIRK, R. (1987). - A history of marine fish culture in Europe and North America. - Farnham: Fishing News Books. - 192 p., ill.
- KITSOS, Thomas A. (1988). - Congress and the oceans : shaping marine policy for three decades. Marine Technology Society Journal, 22 (1) : 33-49.

- KNAUSS, John A. (1988). - Academic oceanography : how we got from there to here. Marine Technology Society Journal, 22 (1) : 5-11.
- KOPPER, Philip (1987). - Into the deeps, in : Into the unknown, the story of exploration / ed. Jonathan B. Tourtellot : 284-295, ill. - Washington, D.C. : National Geographic Society.
- LANE, Amor L. (1988). - Marine resources retrospective : progress during the last 25 years. Marine Technology Society Journal, 22 (1) : 71-77.
- LEVERE, Trevor H. (1988). - Vilhjalmur Stefansson, the continental shelf, and a new Arctic continent. British journal for the history of science, 21 (2) : 233-247, ill.
- LILLIE, Frank R. (1988). - The Woods Hole Marine Biological Laboratory. Biological bulletin, 174 (1) supplement, VII-284 p., ill. (reprint of the 1944 edition).
- LUCAS, Cyril (1987). - Historical : the story of fisheries research in Scotland, in : Developments in fisheries research in Scotland / ed. R.S. Bailey & B.B. Parrish : 11-18, ill. - Farnham : Fishing News Books.
- MacLEOD, Roy (1988). - Imperial reflections in the southern seas : the Funafuti expeditions, 1896-1904, in : Nature in its greatest extent : Western science in the Pacific / ed. Roy MacLeod & Philip F. Rehbock : 159-191, ill. - Honolulu : University of Hawaii Press.
- MacLEOD, Roy & REHBOCK, Philip F., ed. (1988). - Nature in its greatest extent : Western science in the Pacific. - Honolulu : University of Hawaii Press. - XIII-288 p., ill.
- MAIENSCHHEIN, Jane (1988). - History of American marine laboratories : why do research at the seashore? American zoologist, 28 (1) : 15-25.
- MARSHALL, Sheina M. (1987). - An account of the Marine Station at Millport; ed. J.A. Allen. Occasional publication - University marine biological station, Millport, 4, 133 p., ill.
- MATON, Gilbert L. (1988). - The Marine Technology Society : highlights of 25 years of service. Marine Technology Society Journal, 22 (1) : 58-63.
- MATTHAUS, Wolfgang (1987). - The history of the Conference of Baltic oceanographers. Beiträge zur Meereskunde, 57 : 11-25, ill.
- MCCORKLE, Barbara B. (1987). - Cartographic history, 1524-1850, in : Georges Bank / ed. Richard H. Backus & Donald W. Bourne : 10-17, ill. - Cambridge, Mass.; London : MIT Press.
- MECHLIN, George (1988). - Marine industrial research and development : an historical perspective. Marine Technology Society Journal, 22 (1) : 12-16.
- MILLER, Thomas R. (1988). - Pictures from an expedition. Natural history, 97 (10) : 94-96, 98-103, ill. (Wilkes expedition).
- MILLIMAN, John D. (1988). - Trends in oceanographic journals : Deep-sea research at 35 years. Deep-sea research, 35 (5) : 635-638, ill.
- MOLLAT, Michel, dir. (1987). - Histoire des pêches maritimes en France. - Toulouse : Privat. - 407 p., ill. - (Bibliothèque historique Privat).

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- NANDAN, S.N. (1987). - The exclusive economic zone : a historical perspective, in : The law and the sea, le droit et la mer, el derecho y el mar, essays in memory of Jean Carroz : 171-188. - Rome : F.A.O.
- NEUSHUL, Peter (1987). - Energy from marine biomass : the historical record, in : Seaweed cultivation for renewable resources / ed. K.T. Bird & P.H. Benson : 1-37, ill. - Amsterdam; Oxford; New York: Elsevier. - (Developments in aquaculture and fisheries science; 16).
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- PENNISI, Elizabeth (1988). - Centennial explores life at marine lab. BioScience, 38 (9) : 596-598, ill. (Woods Hole Marine Biological Laboratory).
- PIETSCH, Theodore W. & GROBECKER, David B. (1987). - Historical perspective, in : Frogfishes of the world : systematics, zoogeography, and behavioral ecology : 3-19, ill. - Stanford : Stanford University Press.
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## Oceanography on Postage Stamps

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Collecting postage stamps is one of the most popular hobbies on earth. One section of this hobby is concerned with thematic or topical collecting rather than with the philatelic purists' study of postal history. Consequently, millions of stamp collectors specialise in one or more of the hundreds of possible "themes" ranging from Architecture to Zoology. During the last couple of years I have become aware that some hundreds of stamps depict subjects which are directly or indirectly "oceanographic". Yet, as far as I know, "oceanography" is not a recognised theme.

Many of these little bits of coloured paper are extremely attractive and can be used to illustrate particular aspects of the history of marine science and, at the same time, introduce the subject to the interested layman. I have already begun to publish such articles in the semi-popular marine science press (see, for instance, Sea frontiers, 33 : 444-453; 34 : 160-163; Seascape, 15 : 14-16; 18 : 29-31). In future issues of the Newsletter I hope to publish similar articles and would be interested in hearing from any readers who are also interested in "oceanographic" stamps.

Since the Newsletter emanates from Monaco, it would, perhaps, be appropriate to begin with some Monegasque stamps. The Principality is justifiably proud of the oceanographic achievements of Prince Albert I, and has consequently issued many beautiful stamps depicting various aspects of his illustrious career. Watch this space !



Centennial of Prince Albert I of Monaco's Last Cruise

aboard the Hirondelle in the Azores

Luiz Saldanha

From July 24th to August 1st, 1988 a meeting was held in the Azorean islands to commemorate the event.

The papers presented covered not only biological and geological aspects of the Azorean seas but also the history of the outstanding work of Prince Albert in this archipelago. The following papers were presented : "Prince Albert I of Monaco, the Azores and the Oceanographic Institute" by Maurice Fontaine; "The Hirondelle in the Azores" by Jacqueline Carpine-Lancre; "Prince Albert I of Monaco and Coronel Afonso Chaves" by Luiz Saldanha; "Prince Albert I and Prince Rainier III, the same concern : to preserve our environment" by Patrick Van Klaveren; "On the problem of the ancient coins of Corvo (Azores)" by Théodore Monod; "Bathymetry of the Azorean Sea" by Frederico Machado; "The Prince and the Azores, the Prince and the whales" by João Afonso; "Oceanography and Meteorology, from Albert I to Rainier III" by Nicole Béthoux.

The proceedings of this meeting will be published soon in Portugal.

## Seminar on the History of Marine Stations in Monaco

Eric L. Mills

Several historians of oceanography, gathering to celebrate the birthday of Albert Ier, Prince of Monaco, on November 13, held an informal seminar on the history of marine stations on November 12, 1988 in the library of the Musée océanographique de Monaco. Attending were Keith Benson (University of Washington, U.S.A.), Jacqueline Carpine-Lancre (Musée océanographique de Monaco), Jacques Chiavérini (CEROV, Villefranche-sur-Mer, France), Margaret Deacon (University of Southampton, U.K.), Gracie Delépine (Bibliothèque nationale de Paris, France), Lucienne Fenaux (CEROV, Villefranche-sur-Mer, France), Christiane Groeben (Stazione zoologica, Napoli, Italy) and Eric Mills (Dalhousie University, Canada).

After a welcome to the Musée océanographique by Jacqueline Carpine-Lancre, Eric Mills introduced the seminar, pointing out the well-known origin of many marine stations in Europe and North America during the 1870's and 1880's. This was a profound redirection of the way field and experimental biology was being conducted, implying a significant reorganization of biology and a change of goals or aims by marine biologists. In this light, the historical background of the origin of marine stations is poorly known.

The featured speaker was Keith Benson, who used several examples of North American marine stations to illustrate the reasons for their foundation and the reasons for the links that were established with Europe. Most early North American marine stations, for example Louis Agassiz's Anderson Scientific School (1873) and even the Marine Biological Laboratory at Woods Hole (1888), were devoted to training secondary school teachers in natural history. But tension soon arose between those who saw the stations as locales for research and those who used them for teaching. As a community of researchers developed in North America late in the 19th century, Americans looked to Europe to learn research, and used European marine laboratories as examples of the path to be followed at home. By the third decade of the twentieth century research had begun to play a larger role in North American stations, a situation enhanced by the division that began to appear between marine biology and oceanography in the 1920's and 1930's.

A lengthy and lively discussion followed about the contrasts between North American and European marine stations, about the role of teaching and research on the two continents, and about the relation between marine biology, the traditional discipline, and the origins of biological oceanography in Europe and North America. Eric Mills summarized the discussion, pointing out that "marine stations" in the late 19th-early 20th centuries represent a spectrum of marine science institutions and that historical study of the reasons for their variety is needed. Many questions remain about the economic, social and scientific climates in which each developed. Margaret Deacon's discussion of her recent work on the history of the Scottish Fishery Board and its role in the early institutionalization of oceanographic research in Britain further exemplified the variety of historical problems that remain to be explored and the need to investigate the context in which marine science developed late in the 19th century.

## Eleventh Benelux Congress on the History of Sciences

### History of Navigation and Marine Sciences

This congress will be held in Bruges, on April 28-30 April 1989. Its purpose is to emphasise the role of the marine sciences in the development of scientific, technological and medical knowledge after 1800.

Address of the Congress Secretariat :

Instituut voor Zeewetenschappelijk Onderzoek (IZWO)  
Prinses Elisabethlaan 69  
B-8401 BREDENE, Belgium.

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### History of Oceanography

at the 18th International Congress of History of Science

West Germany 1989

A one day symposium titled Historical research on oceanography 1800-1950 will be held in Hamburg between 1-4 August 1989 (exact day still uncertain) during the Eighteenth International Congress of History of Science (ICHS-XVIII). Speakers from the United Kingdom, West Germany, Monaco, the U.S.A. and Canada will consider topics such as the interest of the German Reichsmarine in oceanography between the wars, the early organization of oceanography in Britain, the history of expeditions, and recent historiography of oceanography. Time has been scheduled for discussion at the end of morning and afternoon sessions.

A meeting of the Commission of Oceanography, Division of History of Science, International Union of the History and Philosophy of science, open to all, will be held at the end of the afternoon session.

For information and registration forms for the ICHS-XVIII contact :

CPO HANSER SERVICE  
Postfach 1221  
D-2000 HAMBURG - Barsbüttel  
Federal Republic of Germany

## International Economic History Congress

### Session on Ocean Resources : Industries and Rivalries since 1800

This conference will deal with historical aspects of ocean resources exploitation since 1800. The main topics will be :

- the ocean fisheries and their development, including rivalries and international cooperative mechanisms, and international trade in fishery products as an element in world protein and oils supply;
- the relationship of marine science (biology and oceanography) to emergent ocean fisheries management;
- Law of the Sea agreements and their impact on the ocean industries and international rivalries;
- the post-World War II era of offshore petroleum drilling and the planning of additional ocean-floor mining;
- the relationship of environmental policies concerning ocean pollution to the exploitation of ocean resources.

The Congress will be held in Leuven, Belgium, in August 1990.

Address of Session organizer :

Professor H.N. Scheiber  
Boalt Hall School of Law  
University of California  
BERKELEY, California 94720, USA.

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### Conference on Exploration and Discovery

The Conference is organized to commemorate the arrival of Captain George Vancouver on the Pacific Coast of North America in 1792. It is sponsored by the Simon Fraser University, Burnaby, British Columbia, Canada, and will take place on 17-19 April 1992.

Proposals for papers will be accepted up to September 15, 1989. Those interested in participating should send summaries (100-200 words) of their prospective papers along with brief curriculum vitae to :

The Director  
Vancouver Conference  
Department of History  
Simon Fraser University  
BURNABY, British Columbia  
Canada, V5A 1S6.

**Fifth International Congress on the History of Oceanography  
(July 1993)**

After studying several submissions, the Commission of Oceanography under its President Professor Jean Théodoridès has chosen the Scripps Institution of Oceanography, La Jolla, California, U.S.A. as the site of the Fifth International Congress on the History of Oceanography (ICHO-V).

ICHO-V, following congresses in Monaco (1966), Edinburgh (1972), Woods Hole (1980) and Hamburg (1987) will have as its title Oceanography : the Pacific perspective. It will celebrate the 90th anniversary of the founding of the Scripps Institution. With the support of Dr. Edward Frieman, Director of the Institution (a division of the University of California at San Diego), local arrangements are in the hands of Deborah Day, Archivist at S.I.O. Programme will be organized by Keith Benson (University of Washington, Seattle) and P.F. Rehbock (University of Hawaii).

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**Il y a cent ans, le Prince Albert ...**

This is the title of a small exhibit organized in the Musée océanographique de Monaco since 1984 to commemorate the centenary of the scientific cruises and endeavours of Prince Albert. It is renewed every year. Logbooks, manuscripts, photographs, paintings as well as apparatus from the Museum's collections and archives are used for these exhibitions.

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