

## MARINE SCIENCE AND TECHNOLOGY

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### Introduction

The world's oceans and estuaries fascinate many—from oceanographers studying the deep seas to resource managers regulating fishing seasons to children finding their first seashell on the beach. The complexity of the marine environment is reflected in the specialized and interdisciplinary journals covering marine science. Journals can focus on particular flora or fauna, a certain subdiscipline, or on one ocean basin. Specialized scientific publications address particular aspects of the system including its physical dynamics and its chemistry, geology, and biology. There are journals devoted to the technology used to explore the oceans and estuaries, advising engineers how to manage and harness the dynamic environment. Policy and management journals address the complexity of human interaction with the sea and aid planners who need to translate research into practice. Maritime titles cover transportation and law of the sea.

The breadth of the field challenges a librarian shaping a collection. A comprehensive research collection is difficult to maintain given the vastness of the subject and the number of related titles. The classic subfields of oceanography—physical, biological, chemical, and geological—each have specific journals in addition to those covering all aspects. Studying the marine realm on a global scale often involves remote-sensing technology, a topic not covered in this section. Also, other special technical and engineering journals are important to marine science research, and should be part of a strong academic collection. Marine policy is crafted on scientific foundations; so collections involved with environmental planning and management need the scientific and the social science titles as well.

For those collecting for a nonacademic audience, few marine titles are aimed at the general public, yet the subject is well covered in *National Geographic*, *Scientific American*, and other general science and environment periodicals in addition to the ones mentioned below. Librarians selecting journals in the marine sciences should know the interests and needs of their audience and make choices accordingly.

Identifying marine science information is also challenging because it is so multidisciplinary. Not one index covers the field comprehensively. *Web of Science* provides adequate general access. For the subfields of oceanography, the librarian will need access to resources such as *SciFinder Scholar (Chemical Abstracts)* or *GeoRef* depending on the research question. *Biosis* and *Zoological Record* cover the biological aspects well. *Aquatic Science and Fisheries Abstracts (ASFA)* is an essential resource for the applied science of the marine and estuarine environments. Marine policy and management information remains more difficult to access and requires multiple indexes including *ASFA* and relevant social sciences databases. For general public and basic academic collections, an index such as EBSCO's *Academic Search Premier* is adequate for both the science and management elements of the field.

### Basic Periodicals

Hs, Ga: *California Wild*, *Cousteau Kids*, *Currents*, *Explorations*, *Oceanus*; Ac: *Advances in Marine Biology*, *Deep-Sea Research, Parts 1 and 2*, *Journal of Experimental Marine Biology and Ecology*, *Journal of Marine Research*, *Journal of Physical Oceanography*, *Limnology and Oceanography*, *Marine Biology*, *Marine Ecology Progress Series*, *Marine Geology*, *Marine Mammal Science*, *Oceanography*, *Oceanography and Marine Biology*, *Progress in Oceanography*.

### Basic Abstracts and Indexes

*Aquatic Sciences and Fisheries Abstracts*, *Biosis*, *Web of Science*, *National Sea Grant Library Database* (<http://nsgl.gso.uri.edu>).

4605. *Advances in Marine Biology*. [ISSN: 0065-2881] 1963, irreg. Ed(s): Craig Young, Lee Fuiman. Academic Press, 525 B St, Ste 1900, San Diego, CA 92101-4495; [apsubs@acad.com](mailto:apsubs@acad.com); <http://www.academicpress.com>. Index. Refereed. Reprint: ISI. *Indexed:* B&AI, ChemAb, OcéAb, SCI, ZooRec. *Aud.:* Ac.

Provides in-depth, timely reviews on a wide range of topics in marine biology, fisheries science, ecology, zoology, and oceanography. One to three volumes are published annually with some volumes containing several review articles while others focus on a theme such as aquatic geomicrobiology or biogeography of the oceans. Essential to both academic and research libraries

*American Fisheries Society. Transactions*. See Fish, Fisheries, and Aquaculture section.

4606. *Applied Ocean Research*. [ISSN: 0141-1187] 1979. 6x/yr. EUR 916. Ed(s): S K Chakrabarti, J Witz. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom; <http://www.elsevier.nl>. Adv. Refereed. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ApMecR, EngInd, M&GPA, OcéAb, PetrolAb, SCI, SWRA. *Aud.:* Ac, Sa.

Ocean engineering is a very specialized discipline with a limited readership. This title provides solid research articles on topics ranging from mooring systems to wave dynamics. Only useful for specialized research collections with engineering interests in the marine environment.

4607. *Aquatic Botany*. [ISSN: 0304-3770] 1975. 8x/yr. EUR 1282. Ed(s): Dr. G Bowes, Jan Vermaat. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; [nlinfo-f@elsevier.nl](mailto:nlinfo-f@elsevier.nl); <http://www.elsevier.nl>. Illus., index, adv. Refereed. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ApEcolAb, BiolAb, ChemAb, EnvAb, ExcerptMed, ForAb, HortAb, IndVet, OcéAb, RRTA, S&F, SCI, SWRA, VetBull. *Bk. rev.:* 1-2, 1,000-3,000 words, signed. *Aud.:* Ac, Sa.

This title satisfies the need for a research outlet on aquatic plant communities, not just marine. Coverage is fairly evenly split between freshwater and saltwater/brackish with a strong interest in various types of wetlands. Articles examine community dynamics as well as basic structure and function. While highly specialized, recommended for academic collections supporting botany and environmental studies.

4608. *Aquatic Conservation: marine and freshwater ecosystems*. [ISSN: 1052-7613] 1991. 7x/yr. USD 1085 print or online ed. Ed(s): Philip Boon. John Wiley & Sons Ltd., The Atrium, Southern Gate, Chichester, PO19 8SQ, United Kingdom; [customer@wiley.co.uk](mailto:customer@wiley.co.uk); <http://www.wiley.co.uk>. Illus., adv. Refereed. Circ: 500. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; OhioLINK; Swets Information Services; Wiley InterScience. Reprint: PSC. *Indexed:* ApEcolAb, BiolAb, FPA, ForAb, IndVet, OcéAb, PollutAb, RRTA, S&F, SCI, SWRA, VetBull, WAB&RSA, WRCInf, ZooRec. *Bk. rev.:* 3, 500-1,000 words. *Aud.:* Ac, Sa.

Conservation of aquatic resources in freshwater, brackish and saltwater environments is examined by the contributors to this journal. Practical management issues as well as more basic considerations of biology and ecology are included. Topics range from the effect of invasive species on habitats, to the relationship of land/water use, to species distribution, to habitat modeling for conservation ends. Special issues appear annually, usually as supplements, and address issues such as pond biodiversity. Recommended for academic collections with aquatic, conservation, and resource management interests.

4609. *Aquatic Living Resources: international journal devoted to aquatic resources*. Incorporates: *Revue des Travaux de l'Institut des Pêches Maritimes*; Formerly (until 1987): *Aquatic Living*; I F R E M E R. *Revue des Travaux*. [ISSN: 0990-7440] 1928. q. EUR 368.58 combined subscription domestic print & online eds.; EUR 380.83 combined subscription in the European Union print & online eds.; USD 405 combined subscription elsewhere print & online eds. E D P Sciences, 17

Ave du Hoggar, Parc d'Activites de Courtaboeuf, BP 112, Les Ulis, F-91944, France; subscribers@edpsciences.org; http://www.edpsciences.org. Illus. Refereed. Circ: 950. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, C&ISA, CerAb, HortAb, IAA, IndVet, OceAb, RRTA, S&F, SCI, SWRA, VetBull, WAE&RSA, ZooRec. *Aud.:* Ac.

Applied research on the living resources in aquatic habitats, from freshwater to marine, is the primary focus of this title. Coverage is worldwide with a non-North American bias. Research papers and shorter notes address resource biology as it relates to management and exploitation of those resources. Typically, one of the four issues is dedicated to a special issue such as common carp genetics or cephalopod life history and fisheries. Appropriate for academic collections with a strong marine and fisheries focus.

**4610. *Aquatic Mammals.*** [ISSN: 0167-5427] 1972. 3x/yr. USD 190 (Individuals, USD 95). Ed(s): Jeanette Thomas. Western Illinois University Regional Center, 3561 60th St, Moline, IL 61265. Illus. Refereed. Circ: 300. Vol. ends: No. 3. *Indexed:* BiolAb, IndVet, OceAb, VetBull, ZooRec. *Bk. rev.:* 1, 1,000 words. *Aud.:* Ac, Sa.

The European Association for Aquatic Mammals has a strong interest in the care and conservation of aquatic mammals. Articles published here reflect this, covering health issues and human interaction as well as basic life history of various species. They vary in length from brief observations of behavior to in-depth descriptions of disease. The journal focuses more on medicine and care than *Marine Mammal Science*, another of the few titles addressing marine mammals. Appropriate for academic collections with marine mammal research and veterinary schools.

*Biological Bulletin.* See Zoology section.

**4611. *Botanica Marina.*** [ISSN: 0006-8055] 1957. bi-m. EUR 1113 EUR 204 newsstand/cover. Ed(s): A R O Chapman, Walter de Gruyter GmbH & Co. KG, Genthiner Str 13, Berlin, 10785, Germany; bot.mar.editorial@degruyter.de; http://www.degruyter.com/journals/bm. Illus., index, adv. Sample. Refereed. Circ: 450 Paid. Online: EBSCO Publishing; OCLC Online Computer Library Center, Inc.; Swets Information Services. Reprint: PSC. *Indexed:* BiolAb, ChemAb, FPA, ForAb, HortAb, OceAb, S&F, SCI, SWRA, WAE&RSA, ZooRec. *Aud.:* Ac, Sa.

This journal covers all aspects of marine algae and marine angiosperms: systematics, floristics, biogeography, biochemistry, molecular biology, genetics, chemistry, mycology, and microbiology. It is global in scope, focuses on the utilization of marine plants and algae, and differs from *Aquatic Botany*, which focuses on aquatic plant communities. *Botanica Marina* is accredited with the International Association for Plant Taxonomy for the registration of new names of algae and fungi (including fossils). Recommended for academic collections, especially those with an interest in resource utilization.

**4612. *Bulletin of Marine Science.*** Formerly (until 1964): *Bulletin of Marine Science of the Gulf and Caribbean.* [ISSN: 0007-4977] 1951. bi-m. USD 370 print & online eds. (Individuals, USD 155 print & online eds.). Ed(s): Samuel C Snedaker. Rosenstiel School of Marine and Atmospheric Science, 4600 Rickenbacker Causeway, Miami, FL 33149-1098; bms@rsmas.miami.edu; http://www.rsmas.miami.edu/bms/. Refereed. Circ: 1000 Paid. *Indexed:* AnBeAb, ApEcolAb, B&AI, BiolAb, ChemAb, EnvAb, ExcerptMed, ForAb, HortAb, IBR, IndVet, M&GPA, OceAb, PetrolAb, PollutAb, RRTA, S&F, SCI, SWRA, VetBull, WAE&RSA, ZooRec. *Bk. rev.:* 3, 300 words, signed. *Aud.:* Ac.

Contributions include all aspects of marine biological research conducted in tropical and subtropical oceans: marine biology, biological oceanography, fisheries, marine affairs, applied marine physics, marine geology and geophysics, marine and atmospheric chemistry, and meteorology and physical oceanography. Of interest to those in tropical and subtropical settings or those academic institutions with a global interest in marine biology.

**4613. *Cahiers de Biologie Marine.*** [ISSN: 0007-9723] 1960. q. EUR 226.89 domestic; EUR 222.22 foreign. Ed(s): Claude Jouin Toulmond. Station Biologique de Roscoff, Place Georges Teissier, BP 74, Roscoff, Cedex 29682, France; jouin@sb-roscoff.fr; http://www.sb-roscoff.fr/cbmintro\_eng.html. Illus., adv. Refereed. Circ: 400. *Indexed:* BiolAb, ChemAb, ForAb, HortAb, OceAb, PollutAb, S&F, SCI, SWRA, WAE&RSA, ZooRec. *Aud.:* Ac.

Includes papers on all aspects of biological oceanography and the biology of marine organisms: benthic and planktonic ecology, ecophysiology, population dynamics, population genetics, food webs, systematics, and phylogeny. This title is decidedly worldwide in scope. Appropriate for academic institutions supporting a marine biology curriculum or marine biology research.

**4614. *California Wild: natural sciences for thinking animals.*** Formerly (until 1997): *Pacific Discovery.* [ISSN: 1094-365X] 1948. q. USD 12.95 domestic; USD 22 foreign. Ed(s): Kathleen Wong. California Academy of Sciences, 875 Howard St, San Francisco, CA 94103. Illus., adv. Circ: 30000. Microform: PQC. *Indexed:* BiolDig, *Bk. rev.:* 4, 300 words, signed. *Aud.:* Hs, Ga.

The California Academy of Science publishes this quarterly magazine for those interested in the natural history of the western United States. While focused on the West, it covers marine and desert topics, astronomy, and general issues in science. Book reviews, seasonal observations, and reports from various departments in the academy round out an issue. The online version does not contain all the content or replicate the strong visuals of the print edition. Useful for collections with students and readers intrigued by natural history.

*Canadian Journal of Fisheries and Aquatic Sciences.* See Fish, Fisheries, and Aquaculture section.

**4615. *Coastal Engineering.*** [ISSN: 0378-3839] 1977. 12x/yr. EUR 1533. Ed(s): H F Burcharth. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; http://www.elsevier.nl. Refereed. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ApMechR, C&ISA, EngInd, EnvAb, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SWRA, WRCInf. *Aud.:* Ac, Sa.

Another example of a highly specialized title, *Coastal Engineering* is a sister journal to *Applied Ocean Research*. The focus here is on near-shore engineering issues with particular interest in coastal structures (breakwaters and jetties) and wave dynamics of this environment. One volume annually is usually devoted to special topics such as morphodynamics. Only relevant for specialized research collections with engineering interests in the marine environment.

**4616. *Coastal Services: the magazine that links people, resources and information.*** 1998. bi-m. National Oceanic and Atmospheric Administration (NOAA), Coastal Services Center, 2234 South Hobson Ave, Charleston, SC 29405-2413. *Aud.:* Hs, Ac, Sa.

This newsletter provides useful information for coastal resource managers and others interested in coastal issues. Produced by the U.S. National Oceanic and Atmospheric Administration's Coastal Services Center, it highlights projects throughout the country and solutions or strategies to address real issues. The print version is more attractive than the online edition, yet the latter is convenient for the links to other resources. Appropriate for public and academic collections with an audience interested in coastal issues and policy.

**4617. *Continental Shelf Research.*** [ISSN: 0278-4343] 1982. 20x/yr. EUR 2089. Ed(s): Michael B Collins, Richard W Sternberg. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. Refereed. Vol. ends: No. 21. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* DSA, ForAb, IndVet, M&GPA, OceAb, PollutAb, S&F, SCI, SWRA, VetBull, WRCInf, ZooRec. *Aud.:* Ac, Sa.

This journal focuses on the shallow marine environment defined as the coast to the continental shelf break. All aspects of marine science are covered, with an emphasis on processes and innovative techniques applied in this environment.

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Two to four issues every year address special topics such as physical oceanographic modeling and sediment transport. A core title for oceanography collections, although less important for biologically focused collections.

**4618. Coral Reefs.** Formerly: *International Society for Reef Studies.*

*Journal.* [ISSN: 0722-4028] 1982. 4x/yr. EUR 920 print & online eds. Ed(s): Dr. Richard E Dodge, Dr. Peter K Swart. Springer-Verlag, Tiergartenstr 17, Heidelberg, 69121, Germany. Adv. Refereed. Microform: PQC. Online: EBSCO Publishing; OhioLINK; Springer LINK; Swets Information Services. Reprint: ISI; PSC. *Indexed:* BiolAb, OcéAb, PollutAb, SCI, SWRA, ZooRec. *Aud.:* Ac, Sa.

As the title suggests, this publication of the International Society for Reef Studies provides a focal point for all aspects of reef-related research: ecology of reef organisms, nutrient flows, reef structure and morphology, evolutionary ecology of reef biota, and the science behind reef management. One aim of the journal is to emphasize the importance of experimentation, modeling, quantification, and applied science in reef studies. Appropriate for academic institutions, it contains articles of interest to those in environmental studies.

**4619. Cousteau Kids.** irreg. Cousteau Society, Inc., 710 Settlers Landing Rd, Hampton, VA 23669; cousteau@cousteausociety.org; <http://www.cousteau.org>. *Aud.:* Ems, Hs, Ga.

As the title suggests, this publication from the Cousteau Society is geared toward a young audience. Typical issues include stories on expeditions and marine organisms, while conveying the societal goal of educating the public to the importance of the world's oceans. Useful for public and school libraries.

**4620. Current: the journal of marine education.** [ISSN: 0889-5546] 1976. q. Membership, USD 40. Ed(s): Lisa Tooker. National Marine Educators Association, David Niebuhr, Mote Marine Laboratory, Sarasota, FL 34236; <http://www.marine-ed.org>. Illus., adv. Refereed. Circ: 1500. *Aud.:* Ac, Sa.

While its audience is ostensibly science teachers, this title provides well-written, scientifically accurate articles of interest to students and the general reader. Each issue focuses on a single topic (e.g., hydrothermal vents, invasive species) providing a variety of articles, classroom activities, and additional resources. Especially useful for public and academic collections involved with teachers, home-schoolers, aquarium volunteers, et al.

**4621. Deep-Sea Research. Part 1: Oceanographic Research Papers.**

Supersedes in part (until 1993): *Deep-Sea Research. Part A: Oceanographic Research Papers*; Which had former titles (until 1979): *Deep-Sea Research (New York, 1977)*; (until 1977): *Deep-Sea Research and Oceanographic Abstracts*; (until 1961): *Deep-Sea Research (New York, 1953)*. [ISSN: 0967-0637] 1953. 12x/yr. EUR 2425. Ed(s): M Bacon. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. Illus., index, adv. Refereed. Vol. ends: No. 10. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, ChemAb, EngInd, ExcerptMed, M&GPA, OcéAb, PetrolAb, SCI, SWRA, ZooRec. *Aud.:* Ac, Sa.

This journal publishes articles on all aspects of oceanographic research including geological, physical, chemical, and biological aspects of the ocean, sea floor, and air-sea interface. As the title suggests, this publication deals with the deep sea, which is defined as being beyond the continental shelf. An essential journal for any institution with a marine biology or oceanography program.

**4622. Deep-Sea Research. Part 2: Topical Studies in Oceanography.**

Supersedes in part (in 1993): *Deep-Sea Research. Part A, Oceanographic Research Papers*; Which was formerly (until 1978): *Deep-Sea Research (New York, 1977)*; (until 1976): *Deep-Sea Research and Oceanographic Abstracts*; (until 1961): *Deep-Sea Research (New York, 1953)*. [ISSN: 0967-0645] 1993. 26x/yr. EUR 3286. Ed(s): John Milliman. Pergamon,

The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. Refereed. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ChemAb, EngInd, M&GPA, OcéAb, S&F, SCI, ZooRec. *Aud.:* Ac, Sa.

Topical issues include results of international or interdisciplinary projects and collections of conference papers. Issues frequently have nontext supporting materials (numerical data, images, and video) that are made available electronically. Along with its companion journal *Deep-Sea Research Part 1: Oceanographic Research Papers*, this title is essential for any institution with a marine biology or oceanography program.

*Dynamics of Atmospheres and Oceans.* See Atmospheric Sciences section.

**4623. Estuaries and Coasts.** Former titles (until Feb. 2006): *Estuaries; Chesapeake Science.* [ISSN: 1559-2723] 1978. bi-m. USD 510. Ed(s): Carlos Duarte, Dr. Stephen Threlkeld. Estuarine Research Federation, 2018 Daffodil, PO Box 510, Port Republic, MD 20676; [stt@estuaries-olemiss.edu](mailto:stt@estuaries-olemiss.edu); <http://erf.org/journal.html>. Illus., index, adv. Refereed. Circ: 1800. Vol. ends: No. 4. Microform: MIM; PMC; PQC. Online: EBSCO Publishing; JSTOR (Web-based Journal Archive). Reprint: PQC. *Indexed:* Agr, AnBeAb, ApEcolAb, BiolAb, ChemAb, ExcerptMed, ForAb, HortAb, M&GPA, OcéAb, PollutAb, RRTA, S&F, SCI, SWRA, WAB&RSA, WRCInf, ZooRec. *Bk. rev.:* 2, 500 words. *Aud.:* Ac.

More limited than *Estuarine, Coastal and Shelf Science*, *Estuaries and Coasts* (formerly *Estuaries*) focuses on the ecology, dynamics, and habitats within the ocean/land interface. Many of the articles describe eastern U.S. projects, with a handful on the Pacific coast and other parts of the world. Recent articles explore the evolution of tidal creeks and wetlands, restoration models, and food resources for sturgeon. As a society-published journal, it is reasonably priced and of consistent quality. Appropriate for academic collections with a nearshore focus or interest in environmental change.

**4624. Estuarine, Coastal and Shelf Science.** Formerly (until 1982):

*Estuarine and Coastal Marine Science.* [ISSN: 0272-7714] 1973. 20x/yr. EUR 2850. Ed(s): D. S. McLusky, S. D. Sulkln. Academic Press, Harcourt Pl, 32 Jamestown Rd, London, NW1 7BY, United Kingdom; [apsubs@acad.com](mailto:apsubs@acad.com); <http://www.elsevier.com/>. Illus., index, adv. Refereed. Vol. ends: No. 6. Online: EBSCO Publishing; Gale Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, ChemAb, EnvAb, ExcerptMed, FPA, ForAb, HortAb, IndVet, M&GPA, OcéAb, PetrolAb, PollutAb, RRTA, S&F, SCI, SWRA, VetBull, WAE&RSA, WRCInf, ZooRec. *Aud.:* Ac.

This title provides a focused forum dealing with the study of estuaries, coastal zones, and continental shelf seas. *Estuarine, Coastal and Shelf Science* is both international and multidisciplinary, and presents research conducted from the upper limits of the tidal zone to the outer edge of the continental shelf. The scope of this journal includes research on the wide range of biological, anthropogenic, physical, and meteorological influences that come to play within estuaries and coasts. An important part of any marine science collection.

*European Journal of Phycology* See Botany section.

**4625. Explorations (La Jolla): global discoveries for tomorrow's world.** Incorporates (in 1994): *Scripps Institution of Oceanography. Annual Report*; Which was formerly (until 1984): *Scripps Institution of Oceanography (Year)*; (until 1978): *S I O Scripps Institution of Oceanography*; (until 1976): *Scripps Institution of Oceanography. Annual Report*; (until 1972): *S I O: A Report on the Work and Programs of Scripps Institution of Oceanography*. [ISSN: 1075-2560] 1994. q. Ed(s): Nan P Crique. Scripps Institution of Oceanography, Technical Publications Office, University of California at San Diego, 9500 Gilman Dr, La Jolla, CA 92093-0233; [techpubs@sio.uscd.edu](mailto:techpubs@sio.uscd.edu). Illus. Circ: 18000. *Aud.:* Ems, Hs, Ga.

The research of the Scripps Institution of Oceanography is reported in feature articles, short highlights, and profiles of scientists. The magazine well serves its purpose as an outreach tool to the public and those interested in the Scripps Institution. The content reflects the breadth of Scripps marine research both geographically and topically. A special section, "Voyager," targets school age children and has an excellent web counterpart. The winter issue is a DVD, and the other three issues are print. Appropriate for middle school audiences and academic collections with a strong undergraduate marine program.

**Fisheries.** See Fish, Fisheries, and Aquaculture section.

**Fishery Bulletin.** See Fish, Fisheries, and Aquaculture section.

**G3: Geochemistry, Geophysics, Geosystems.** See Earth Sciences section.

- 4626. Global and Planetary Change.** [ISSN: 0921-8181] 1988. 20x/yr. EUR 1528. Ed(s): S. Cloetingh, C. Covey. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; <http://www.elsevier.nl>. Illus., index, adv. Refereed. Vol. ends: No. 6. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* EnvAb, ForAb, M&GPA, MinerAb, OceAb, PollutAb, S&F, SCI, SSCI, SWRA, WAE&RSA, ZooRec. *Aud.:* Ac, Sa.

This journal is of interest to earth scientists, oceanographers, and biologists. It focuses on the record of change in the earth's history and presents multidisciplinary analysis of recent and future changes. Topics include changes in the chemical composition of the oceans and atmosphere, climate change, sea level variations, human geography, global geophysics and tectonics, global ecology, and biogeography. Useful for a wide variety of academic institutions, particularly those with environmental studies and oceanography programs.

- 4627. Global Biogeochemical Cycles: an international journal of global change.** [ISSN: 0886-6236] 1987. q. USD 604. Ed(s): Meinrat O. Andreae. American Geophysical Union, 2000 Florida Ave, NW, Washington, DC 20009-1277; <http://www.agu.org>. Illus., adv. Refereed. Vol. ends: No. 4. Microform: AJP. Online: EBSCO Publishing. *Indexed:* Agr, ChemAb, FPA, ForAb, HortAb, M&GPA, OceAb, PollutAb, S&F, SCI, SWRA, WAE&RSA. *Aud.:* Ac, Sa.

This is a very important journal within environmental science, geoscience, meteorology, and atmospheric science. Articles include research on geosphere and biosphere changes resulting from marine, hydrologic, atmospheric, extraterrestrial, geologic, and human causes over time scales large and small. An essential part of academic library collections supporting oceanography and environmental studies programs.

- 4628. Harmful Algae.** [ISSN: 1568-9883] 2002. 6x/yr. EUR 332. Ed(s): Dr. Sandra E. Shumway, Theodore Smayda. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; <http://www.elsevier.nl>. *Indexed:* BiolAb, FS&TA, HortAb, IndVet, OceAb, S&F, SCI, VetBull, ZooRec. *Aud.:* Sa.

This title provides a forum for information on harmful microalgae and cyanobacteria in both fresh and marine waters. It focuses on the life histories, physiology, toxicology, monitoring, and management of blooms, and includes both original research and reviews. Appropriate for libraries supporting research in this area and those serving an extensive environmental studies program.

- 4629. I C E S Journal of Marine Science.** Former titles (until 1991): *Conseil International pour l'Exploration de la Mer: Journal*; (until 1968): *Conseil Permanent International pour l'Exploration de la Mer: Journal*. [ISSN: 1054-3139] 1926. 9x/yr. GBP 570. Ed(s): A I L Payne. Oxford University Press, Great Clarendon St, Oxford, OX2 6DP, United Kingdom; [enquiry@oup.co.uk](mailto:enquiry@oup.co.uk); <http://www.oxfordjournals.org/>. Adv. Refereed. Circ: 1000. Online: EBSCO Publishing; Gale Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, ChemAb, EnvAb, HortAb, IndVet, OceAb, PollutAb, RRTA, S&F, SCI, SWRA, VetBull, WAE&RSA, ZooRec. *Aud.:* Ac.

The International Council for the Exploration of the Sea (ICES) coordinates and promotes applied research in the North Atlantic. Its journal is an outlet for that research as well as for other information contributing to a broad understanding of all marine systems, their resources, and the effects of human activity on both. Articles address management and conservation issues through biology and ecology, fishing and other human activities, climate change, and changes in technology. Typically, one or two issues of the eight per year are symposium proceedings; ICES offers these as a separate series, but it is more efficient to purchase through the journal subscription. An essential title for marine science research collections.

- 4630. IEEE Journal of Oceanic Engineering.** [ISSN: 0364-9059] 1976. q. USD 285. Ed(s): James F Lynch. IEEE, 445 Hoes Ln, Piscataway, NJ 08854-1331; [subscription-service@ieee.org](mailto:subscription-service@ieee.org); <http://www.ieee.org>. Illus., index, adv. Refereed. Vol. ends: No. 4. Online: Pub.; EBSCO Publishing. *Indexed:* AS&TI, C&ISA, EngInd, H&SSA, IAA, M&GPA, OceAb, PetrolAb, SCI. *Aud.:* Ac, Sa.

The IEEE Oceanic Engineering Society encourages articles and technical communications that apply electrical, electronics, and instrumentation engineering to the marine environment. Topics vary from specific design of new instruments for marine research, such as satellite tags, to investigation of ambient noise. More important than *Ocean Engineering* to both engineering and oceanographic collections.

**Journal of Atmospheric and Oceanic Technology.** See Atmospheric Sciences section.

- 4631. The Journal of Cetacean Research and Management.** [ISSN: 1561-0713] 1999. 3x/yr. GBP 110 (Individuals, GBP 75; GBP 25 per issue). Ed(s): G P Donovan. International Whaling Commission, The Red House, 135 Station Rd, Impington, CB4 9NP, United Kingdom; [secretariat@iwcoffice.org](mailto:secretariat@iwcoffice.org); <http://www.iwcoffice.org>. Refereed. *Indexed:* BiolAb, OceAb, ZooRec. *Aud.:* Ac, Sa.

This title replaces the scientific section of *Reports of the International Whaling Commission* (IWC) and publishes peer-reviewed papers important to the conservation and management of cetaceans. The focus tends toward population abundance and distribution, and the affects of harvest and other human interactions, with occasional notes on unusual sightings or behavior. An annual supplement includes the *Reports of the IWC Scientific Committee*, containing population trends, discussion of issues and concerns, and management updates. Appropriate for research collections with strong marine mammal programs.

- 4632. Journal of Coastal Research: an international forum for the littoral sciences.** Formerly (until 1984): *Littoralia*. [ISSN: 0749-0208] 1985. q. Individuals, USD 125 print & online eds. Ed(s): Charles W Finkl, Jr. Coastal Education & Research Foundation, Inc., PO Box 210187, Royal Palm Beach, FL 33421-0187; [cfinkl@gate.net](mailto:cfinkl@gate.net); <http://www.cerf-jcr.com>. Illus., index, adv. Refereed. Circ: 1500. Vol. ends: No. 4. *Indexed:* AS&TI, BiolAb, BioIDig, C&ISA, CerAb, ExcerptMed, ForAb, HortAb, IAA, M&GPA, OceAb, PollutAb, RRTA, S&F, SCI, SSCI, SWRA, WAE&RSA, ZooRec. *Bk. rev.:* 2, 1,000 words, signed. *Aud.:* Ac.

This title provides "an international forum for the littoral sciences," and it covers the coastal zone in-depth and internationally. Research topics range from validating surf observations to sediment transport patterns to seabed geomorphology. Several issues each year have a thematic section addressing a geographic area or topic of interest. The quality of the illustrations is excellent. A solid choice for libraries with marine and geoscience collections.

- 4633. Journal of Experimental Marine Biology and Ecology.** [ISSN: 0022-0981] 1967. 28x/yr. EUR 4449. Ed(s): Dr. Sandra E. Shumway, Dr. P M J Herman. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; <http://www.elsevier.nl>. Illus., index, adv. Refereed. Vol. ends: No. 2. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. Reprint: ISI. *Indexed:* ApEcolAb, B&AI, BiolAb, ChemAb, EnvAb, ExcerptMed, ForAb, HortAb, IndVet, OceAb, PollutAb, S&F, SCI, SSCI, SWRA, VetBull, ZooRec. *Bk. rev.:* 1, 1,000 words, signed. *Aud.:* Ac.

## MARINE SCIENCE AND TECHNOLOGY

The focus of this journal is laboratory and field experimental study, and its scope includes biochemistry, physiology, behavior, genetics, ecosystems, and ecological modeling. Of interest to marine ecologists, physiologists, and biochemists, this title is appropriate for academic institutions with marine biology, oceanography, and ecology programs.

*Journal of Geophysical Research.* See Earth Sciences section.

**4634. *Journal of Marine Research.*** [ISSN: 0022-2402] 1937. bi-m. USD 150 (Individuals, USD 50). Ed(s): George Veronis. Sears Foundation for Marine Research, Kline Geology Laboratory, Yale University, New Haven, CT 06520-8109; jmr@yale.edu. Illus., index. Refereed. Circ: 1000. Vol. ends: No. 6. Microform: PMC; PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect. *Indexed:* ApMecR, B&AI, BiolAb, ChemAb, ExcerptMed, GSI, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SWRA, ZooRec. *Aud.:* Ac.

The scope of this journal, from the Sears Foundation for Marine Research of Yale University, includes physical, biological, and chemical oceanography, and a preference is given to articles that report on a combination and interaction of ecological and physical processes. This publication is global in scope and affordably priced. Essential to all marine science collections.

**4635. *Journal of Marine Science and Technology.*** [ISSN: 0948-4280] 1996. q. EUR 192 print & online eds. Ed(s): Hideaki Miyata. Springer Japan, No 2 Funato Bldg, 1-11-11 Kudan-kita, Tokyo, 102-0073, Japan; <http://www.springer.jp>. Refereed. Reprint: PSC. *Indexed:* EngInd, OceAb, SCI. *Aud.:* Ac, Sa.

The title of this journal suggests a broader subject coverage than in reality. The narrow focus on marine engineering and naval architecture includes articles on hull design, stability modeling, and material strength; important to the field, but not terribly relevant to others in marine science. Appropriate only for libraries supporting marine engineering studies.

**4636. *Journal of Marine Systems.*** [ISSN: 0924-7963] 1990. 20x/yr. EUR 2273. Ed(s): W Fennel, J L Largier. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; <http://www.elsevier.nl>. Illus., adv. Refereed. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* EngInd, EnvAb, M&GPA, OceAb, PollutAb, S&F, SCI, SWRA, ZooRec. *Aud.:* Ac, Sa.

As implied in its title, this journal examines interdisciplinary, system-driven questions in the marine environment. Scale ranges from lagoons to ocean basins, all with a focus on how the marine system shapes the biological, chemical, and physical environment. Coverage is international. Appropriate for research oceanography collections, especially those with a physical emphasis.

**4637. *Journal of Oceanography.*** Supersedes in part (in 1992): *Oceanographical Society of Japan. Journal.* [ISSN: 0916-8370] 1941. bi-m. EUR 938 print & online eds. Ed(s): K Hanawa. Springer-Verlag Dordrecht, Van Godewijckstraat 30, Dordrecht, 3311 GX, Netherlands; <http://www.springeronline.com>. Illus., adv. Refereed. Circ: 2100. Reprint: PSC. *Indexed:* ChemAb, M&GPA, OceAb, PollutAb, SCI, SWRA, ZooRec. *Aud.:* Ac, Sa.

Originally published as the outlet for the Oceanographic Society of Japan, this journal continues to be biased towards basic oceanographic research in the Pacific Basin. Relevant topics include current dynamics, chemical fluxes, and occasional biological phenomena. Most useful for oceanography collections supporting research in the Pacific.

*Journal of Phycology.* See Botany section.

**4638. *Journal of Physical Oceanography.*** [ISSN: 0022-3670] 1971. m. USD 428. Ed(s): Peter Muller. American Meteorological Society, 45 Beacon St, Boston, MA 02108; amsinfo@ametsoc.org; <http://ams.allenpress.com>. Illus., index, adv. Refereed. Circ: 1397. Vol. ends: No. 12. Online: Allen Press Inc.; bigchalk; EBSCO Publishing;

Northern Light Technology, Inc.; OCLC Online Computer Library Center, Inc.; ProQuest Information & Learning. *Indexed:* ApMecR, BiolDig, CCMJ, ChemAb, EngInd, IAA, M&GPA, MathSciNet, OceAb, PetrolAb, SCI, SWRA. *Aud.:* Ac, Sa.

The American Meteorological Society publishes this journal relating to the physics of the ocean and the processes that operate at its boundaries. The primary aim of the journal is to promote understanding of the ocean and its role within the earth system. Typical articles address surface phenomena, oceanography (large and small scale), circulation, and modeling. A core journal for all academic libraries serving an oceanography program.

**4639. *Journal of Plankton Research.*** [ISSN: 0142-7873] 1979. 13x/yr. GBP 536. Ed(s): Kevin J Flynn. Oxford University Press, Great Clarendon St, Oxford, OX2 6DP, United Kingdom; jnl.orders@oup.co.uk; <http://www.oxfordjournals.org/>. Illus., index, adv. Refereed. Circ: 620. Vol. ends: No. 3. Online: EBSCO Publishing; Gale Group; HighWire Press; IngentaConnect; OCLC Online Computer Library Center, Inc.; OhioLINK; Ovid Technologies, Inc.; Oxford University Press Online Journals; ProQuest Information & Learning; Swets Information Services. Reprint: PSC. *Indexed:* AnBeAb, ApEcolAb, ArtHuCI, BiolAb, ChemAb, FPA, ForAb, IndVet, OceAb, PollutAb, S&F, SCI, SWRA, ZooRec. *Bk. rev.:* 1, 500 words, signed. *Aud.:* Ac, Sa.

Ecology, physiology, taxonomy, and behavior of plankton are covered in this journal, with a majority of articles describing marine environments. Contributors address these drifting organisms, zooplankton, and phytoplankton with research articles and short communications. Occasional "horizon" pieces challenge traditional views or review current trends. An essential title for biological oceanography research collections.

**4640. *Journal of Sea Research.*** Formerly (until vol.35, 1996): *Netherlands Journal of Sea Research.* [ISSN: 1385-1101] 1961. 8x/yr. EUR 576. Ed(s): C. J.M. Philippart, J J Beukema. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; <http://www.elsevier.nl>. Refereed. Circ: 600. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, ChemAb, EnvAb, ExcerptMed, M&GPA, OceAb, S&F, SCI, ZooRec. *Aud.:* Ac, Sa.

Another of the many titles examining coastal and shelf ecosystems, this journal has a northern European bias, yet covers topics of interest to coastal scientists everywhere. Appropriate for research collections in the marine sciences.

**4641. *Journal of Waterway, Port, Coastal, and Ocean Engineering.*** Former titles (until 1982): *American Society of Civil Engineers. Waterway, Port, Coastal and Ocean Division. Journal;* (until 1977): *American Society of Civil Engineers. Waterways, Harbors, and Coastal Engineering Division. Journal;* (until 1973): *American Society of Civil Engineers. Waterways and Harbors Division. Journal.* [ISSN: 0733-950X] 1956. bi-m. USD 356. Ed(s): Vijay Panchang. American Society of Civil Engineers, 1801 Alexander Bell Dr, Reston, VA 20191-4400; <http://www.pubs.asce.org>. Illus. Refereed. Circ: 2000. Microform: PQC. Online: EBSCO Publishing; Scitation; Swets Information Services. Reprint: PQC. *Indexed:* AS&TI, C&ISA, CerAb, EngInd, EnvAb, H&SSA, IAA, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SWRA, WRCInf. *Aud.:* Ac, Sa.

This international journal focuses on the applied issues of civil engineering in the aquatic environment, from bridge construction to wave action on breakwaters to forcing action in open waters. Sponsored by the American Society of Civil Engineers, the technical papers, notes, and discussion items address issues of interest globally while describing local solutions. Essential for engineering collections with interest in the marine and aquatic environments.

**4642. *Limnology and Oceanography.*** [ISSN: 0024-3590] 1956. 8x/yr. USD 378. American Society of Limnology and Oceanography, Inc., 1444 Bye St. NW #200, Washington, DC 20005; business@aslo.org; <http://www.aslo.org>. Illus., index. Refereed. Circ: 5300 Paid. Vol. ends: No. 8. *Indexed:* AnBeAb, ApEcolAb, B&AI, BiolAb, ChemAb, EnvAb, ExcerptMed, GSI, IndVet, M&GPA, OceAb, PollutAb, S&F, SCI, SWRA, WRCInf, ZooRec. *Bk. rev.:* 2, 750 words, signed. *Aud.:* Ac, Sa.

This journal is published by the American Society of Limnology and Oceanography, but it is not limited to North America in geographic scope. Unfortunately, the print publication is bundled with electronic access and is now only available as part of a package that also includes the more specialized partner journal *Limnology and Oceanography: Methods* (electronic-only) and the society's *Bulletin*. The focus of this journal is aquatic ecosystems and includes original research articles on all aspects of limnology and oceanography. An essential journal for any academic institution with a marine biology or oceanography program, but it will also result in a subscription to the more specialized *Methods* journal and the society's news bulletin.

**4643. *Marine and Freshwater Research*.** Formerly (until 1995): *Australian Journal of Marine and Freshwater Research*. [ISSN: 1323-1650] 1950. 8x/yr. AUD 1405 print & online eds. (Individuals, AUD 189 print & online eds.). Ed(s): Dugald McGlashan. C S I R O, Publishing, 150 Oxford St, PO Box 1139, Collingwood, VIC 3066, Australia; publishing@csiro.au; http://www.publish.csiro.au/. Illus., index, adv. Refereed. Circ: 700. Vol. ends: No. 8. Microform: PQC. Online: EBSCO Publishing; Gale Group; OCLC Online Computer Library Center, Inc.; Swets Information Services. *Indexed:* AnBeAb, ApEcolAb, BiolAb, C&ISA, CerAb, ChemAb, EnvAb, ExcerptMed, FPA, FS&TA, ForAb, HortAb, IAA, IndVet, M&GPA, OceAb, PollutAb, RRTA, S&F, SCI, SWRA, VetBull, WAE&RSA, ZooRec. *Aud.:* Ac, Sa.

This journal, published by the Commonwealth Scientific and Industrial Research Organization and the Australian Academy of Science, includes a broad range of interdisciplinary research in ecology, hydrology, biogeochemistry, and oceanography with the overarching goal of highlighting the interconnectedness of aquatic environments, processes, and management applications. Specific subjects can include fisheries science, biogeochemistry, physiology, genetics, biogeography, and toxicology. Although published in Australia, this journal is global in scope. Recommended for academic libraries supporting marine or aquatic-based programs.

**4644. *Marine Biological Association of the United Kingdom. Journal*.** [ISSN: 0025-3154] 1887. bi-m. USD 850. Ed(s): P E Gibbs, R. Seed. Cambridge University Press, The Edinburgh Bldg, Shaftesbury Rd, Cambridge, CB2 2RU, United Kingdom; journals@cambridge.org; http://www.journals.cambridge.org. Illus., index, adv. Refereed. Vol. ends: No. 4. Microform: BHP; PQC. Online: Pub.; EBSCO Publishing; OCLC Online Computer Library Center, Inc.; OhioLINK; Swets Information Services. *Indexed:* B&AI, BiolAb, ChemAb, ForAb, HortAb, IndVet, PollutAb, S&F, SCI, VetBull, WRCInf, ZooRec. *Aud.:* Ac, Sa.

This journal, produced by the Marine Biological Association of the United Kingdom, is international in scope. It publishes on all aspects of marine biology, including ecological surveys and population studies of oceanic, coastal, and shore communities; physiology and experimental biology; taxonomy, morphology, and life history of marine animals and plants; and chemical and physical oceanographic work that relates closely to the biological environment. Appropriate for all academic research libraries with a marine biology program.

**4645. *Marine Biology: international journal on life in oceans and coastal waters*.** [ISSN: 0025-3162] 1967. m. EUR 5088 print & online eds. Ed(s): Otto Kinne. Springer-Verlag, Tiergartenstr 17, Heidelberg, 69121, Germany. Illus., adv. Sample. Refereed. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; OhioLINK; ProQuest Information & Learning; Springer LINK; Swets Information Services. Reprint: ISI; PSC. *Indexed:* AnBeAb, ApEcolAb, B&AI, BiolAb, ChemAb, DSA, EnvAb, ExcerptMed, FS&TA, ForAb, HortAb, IBR, IndVet, OceAb, S&F, SCI, SWRA, VetBull, ZooRec. *Aud.:* Ac, Sa.

This journal is very broad in scope, including research on all aspects of plankton research, biological and biochemical oceanography, environment-organism interrelationships, experimental biology, metabolic rates and routes, biochemical research on marine organisms, biosystem research, energy budgets, dynamics and structures of communities, use of marine resources, anthropogenic influences on marine environments, evolution, modeling, and scientific apparatus and techniques. A broadly focused journal essential to every marine science collection.

**4646. *Marine Biology Research*.** Formed by the merger of (1961-2005): *Sarsia*; (1964-2005): *Ophelia*. [ISSN: 1745-1000] 2005. bi-m. GBP 194 print & online eds. Ed(s): Tom Fenchel, Tore Hoisaeter. Taylor & Francis Ltd., 4 Park Sq, Milton Park, Abingdon, OX14 4RN, United Kingdom; info@tandf.co.uk; http://www.tandf.co.uk/journals. *Indexed:* ApEcolAb, BiolAb, OceAb, SCI. *Aud.:* Ac, Sa.

This new journal came about as a merger of the long-standing core titles *Sarsia* and *Ophelia*. It aims to provide an international forum for all areas of marine biology and oceanography, including ecology, behavior, taxonomy, environment, and evolution. Articles on applied research that contribute to general biological insight are also included. Core to academic and research institutions with marine biology or oceanography collections.

**4647. *Marine Biotechnology*.** Formed by the merger of (1992-1998): *Molecular Marine Biology and Biotechnology*; (1993-1998): *Journal of Marine Biotechnology*. [ISSN: 1436-2228] 1998. bi-m. EUR 675 print & online eds. Ed(s): Thomas T Chen, Shigetoh Miyachi. Springer New York LLC, 233 Spring St, New York, NY 10013-1578; journals@springer-ny.com; http://www.springer.com/. Illus., adv. Refereed. Vol. ends: No. 4. Online: EBSCO Publishing; OhioLINK; Springer LINK; Swets Information Services. Reprint: PSC. *Indexed:* BioEngAb, BiolAb, ChemAb, DSA, ForAb, HortAb, IndVet, OceAb, PollutAb, S&F, SCI, VetBull, ZooRec. *Aud.:* Ac, Sa.

This title is the official journal of the European Society for Marine Biotechnology and the Japanese Society for Marine Biotechnology, and is global in scope. Typical topics will include molecular biology, genomics, proteomics, cell biology, and biochemistry, and will be focused on the biotechnology of sea organisms involved. Notably excluded from the journal are articles on genomic or microsatellite sequences or expressed sequence tags unless this research addresses a larger biological issue. Appropriate in libraries supporting marine biology and molecular biology research and advanced undergraduate studies.

**4648. *Marine Chemistry*.** [ISSN: 0304-4203] 1972. 20x/yr. EUR 2123. Ed(s): Frank J Millero. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; ninfo-f@elsevier.nl; http://www.elsevier.nl. Illus., adv. Refereed. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* BiolAb, ChemAb, ExcerptMed, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SWRA, WRCInf. *Aud.:* Ac, Sa.

This title includes original research and occasional reviews addressing chemistry of the marine environment, with an emphasis on dynamics. It is an international forum, and will be of interest to marine chemists, chemical oceanographers, and geochemists. Appropriate for academic collections supporting a research program in marine chemistry or oceanography.

**4649. *Marine Ecology - Progress Series*.** [ISSN: 0171-8630] 1979. 25x/yr. EUR 4950 combined subscription domestic print & online eds.; EUR 5100 combined subscription foreign print & online eds. Ed(s): Otto Kinne. Inter-Research, Nordbunte 23, Oldendorf, 21385, Germany; ir@int-res.com; http://www.int-res.com. Illus., index, adv. Refereed. Circ: 1000. Vol. ends: No. 3. *Indexed:* AnBeAb, ApEcolAb, BiolAb, ChemAb, DSA, ForAb, HortAb, IBR, IndVet, M&GPA, OceAb, PollutAb, S&F, SCI, SWRA, VetBull, ZooRec. *Aud.:* Ac, Sa.

This journal includes research articles, reviews, invited reviews, and notes on topics both fundamental and applied in marine ecology. Topics include botany, zoology, ecological aspects of fisheries and aquaculture, resource management, and ecosystem research. Occasional "theme" sections will synthesize information on a topic by a multi-author team. A core title for libraries supporting teaching and research in environmental studies and marine biology.

**4650. *Marine Environmental Research*.** Incorporates (in 1991): *Oil and Chemical Pollution*; Which was formerly (until 1982): *Journal of Oil and Petrochemical Pollution*. [ISSN: 0141-1136] 1978. 10x/yr. EUR 1522. Ed(s): Dr. John Widdows, Dr. R. Spies. Elsevier Ltd., The Boulevard, Langford Ln, Oxford, OX5 1GB, United Kingdom. Illus., index, adv. Refereed. Vol. ends: No. 5. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK;



## MARINE SCIENCE AND TECHNOLOGY

ScienceDirect; Swets Information Services. *Indexed:* BioLab, ChemAb, DSA, EngInd, EnvAb, ExcerptMed, FPA, FS&TA, ForAb, HortAb, IndVet, OceAb, PetrolAb, PollutAb, S&F, SCI, SWRA, VetBull, WAE&RSA, WRCInf, ZooRec. *Aud.:* Ac, Sa.

Environmental is the key concept for this journal, with its focus on chemical, physical, and biological interactions within the marine realm. Articles examine processes and environmental change with an eye toward understanding systems to facilitate more informed management. The international scope enhances the sharing of information on marine environmental science. Useful for extensive marine science collections.

*Marine Fisheries Review.* See Fish, Fisheries, and Aquaculture section.

4651. *Marine Geodesy: an international journal of ocean surveys, mapping and sensing.* [ISSN: 0149-0419] 1977. q. GBP 308 print & online eds. Ed(s): Dr. Narendra K Saxena. Taylor & Francis Inc., 325 Chestnut St, Ste 800, Philadelphia, PA 19016; info@taylorandfrancis.com; http://www.taylorandfrancis.com. Illus. Refereed. Vol. ends: No. 4. Online: EBSCO Publishing; Gale Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; Swets Information Services. Reprint: PSC. *Indexed:* EnvAb, IBR, M&GPA, OceAb, SSCI. *Bk. rev.:* 3, 500 words. *Aud.:* Ac, Sa.

This international journal covers a highly specialized field of marine studies—the science of measuring and monitoring the ocean. Articles describe instrument bias and calibration challenges, boundary datum, and use of remote sensing. A relevant, yet probably underutilized addition to research collections supporting field-based oceanography programs.

4652. *Marine Geology.* [ISSN: 0025-3227] 1964. 44x/yr. EUR 3516. Ed(s): John T Wells, D. J.W. Piper. Elsevier BV, Radarweg 29, Amsterdam, 1043 NX, Netherlands; nlinfo-f@elsevier.nl; http://www.elsevier.nl. Illus., index, adv. Refereed. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ChemAb, EngInd, M&GPA, OceAb, PetrolAb, PollutAb, SCI. *Aud.:* Ac, Sa.

Along with *Journal of Geophysical Research*, this title provides geologists a venue for discussing rocks and sediments in the marine realm. Its focus is on the science of marine geology, not its management or hydrodynamics. Multiple volumes are published annually, with one or two addressing a special topic such as prodelta systems or linkages of ocean chemistry to geological processes. A core title for geologic oceanography collections.

4653. *Marine Geophysical Researches: an international journal for the study of the earth beneath the sea.* [ISSN: 0025-3235] 1970. q. EUR 595 print & online eds. Ed(s): Y John Chen, Peter Cliff. Springer-Verlag Dordrecht, Van Godewijckstraat 30, Dordrecht, 3311 GX, Netherlands; http://www.springeronline.com. Illus., adv. Refereed. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; OhioLINK; Ovid Technologies, Inc.; Springer LINK; Swets Information Services. Reprint: PSC. *Indexed:* ChemAb, EngInd, M&GPA, OceAb, PetrolAb, SCI. *Aud.:* Ac, Sa.

This publication has traditionally dealt with data on the deep ocean basins, but recently has focused content on understanding the global mid-ocean ridge system. Typical articles may address studies of continental margins, as well as techniques and tools for deep sea floor imaging and measuring. This publication will be of interest to geologists and oceanographers. Recommended for academic and research libraries supporting these types of programs.

4654. *Marine Georesources and Geotechnology.* Formed by the merger of (1975-1993): *Marine Geotechnology*; (1977-1993): *Marine Mining*. [ISSN: 1064-119X] 1993. q. GBP 272 print & online eds. Ed(s): Ronald C Chaney, Michael J Cruickshank. Taylor & Francis Inc., 325 Chestnut St, Ste 800, Philadelphia, PA 19016; info@taylorandfrancis.com; http://www.taylorandfrancis.com. Illus., index, adv. Refereed. Circ: 260. Vol. ends: No. 4. Microform: PQC. Online: EBSCO Publishing; Gale

Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; Swets Information Services. Reprint: PQC; PSC. *Indexed:* AS&TI, BioLab, C&ISA, CerAb, ChemAb, EngInd, EnvAb, IAA, MinerAb, OceAb, PetrolAb, PollutAb, SCI, SWRA. *Aud.:* Ac, Sa.

A companion title to *Marine Geology*, this journal focuses on applied aspects of seafloor sediments and rocks as well as their use. Topics addressed range from characterizations of dredged materials to restoration of marine macrofauna to the effect of nodule mining. Useful for academic collections with marine engineering and applied geology programs.

4655. *Marine Mammal Science.* [ISSN: 0824-0469] 1985. q. USD 232 print & online eds. Ed(s): James Estes. Blackwell Publishing, Inc., Commerce Place, 350 Main St, Malden, MA 02148; customerservices@blackwellpublishing.com; http://www.blackwellpublishing.com. Illus., adv. Refereed. Reprint: PSC. *Indexed:* AnBeAb, ApEcolAb, BioLab, DSA, IndVet, OceAb, RRTA, SCI, VetBull, ZooRec. *Bk. rev.:* 3, 2,000 words. *Aud.:* Ac, Sa.

This journal is published by the Society for Marine Mammalogy. Typical articles address form and function, evolution, systematics, physiology, biochemistry, behavior, population biology, life history, genetics, ecology, and conservation. Articles, review articles, notes, opinions, and letters are all included, and editorial staff screen articles for appropriate experimental procedures involving these often-protected species. A core title for libraries serving a marine biology major.

4656. *Marine Policy.* [ISSN: 0308-597X] 1977. 6x/yr. EUR 919. Ed(s): E D Brown. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. Illus., index, adv. Refereed. Vol. ends: No. 6. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* CJA, EnvAb, ExcerptMed, FutSurv, IBSS, OceAb, PAIS, PollutAb, SSCI, WAE&RSA. *Aud.:* Ac, Sa.

Specialists in marine affairs contribute articles relevant to policy formulation and analysis. The audience includes lawyers, marine resource managers, economists, political scientists, and other social scientists. Recent volumes have an increased focus on fisheries policy although maritime issues and marine management tools are also covered. Occasionally, issues address a special topic giving a historical overview or discussing emerging trends. A core title for academic collections with a marine policy or management component.

4657. *Marine Pollution Bulletin.* [ISSN: 0025-326X] 1970. 24x/yr. EUR 1308. Ed(s): Charles Sheppard, J Pearce. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. Illus., index, adv. Refereed. Circ: 2000 Paid. Vol. ends: No. 12. Microform: PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ApEcolAb, BioLab, ChemAb, DSA, EngInd, EnvAb, ExcerptMed, FPA, FS&TA, ForAb, HortAb, IndVet, M&GPA, OceAb, PetrolAb, PollutAb, RRTA, S&F, SCI, SSCI, SWRA, VetBull, WAE&RSA, WRCInf, ZooRec. *Bk. rev.:* 2, 500 words. *Aud.:* Ac, Sa.

Readers will find an inclusive and rigorous approach to the condition of the marine environment in this journal. Using a variety of features, it documents marine conditions, effects of human activity, and measurements of and responses to pollutants. Brief news items cover pollution activities and events around the globe. The editorials and invited reviews offer in-depth insight into marine environmental issues. In addition to the monthly issues, special issues focus on conferences or topics such as water quality in a geographic region. A core title for academic and research collections supporting environmental science, marine management, and biological oceanography programs.

4658. *Marine Technology Society Journal: the international, interdisciplinary society devoted to ocean and marine engineering, science and policy.* Formerly (until 1968): *Journal of Ocean Technology*; Incorporated: *Ocean Soundings*. [ISSN: 0025-3324] 1966. q. USD 120 domestic; USD 135 foreign. Ed(s): Dan Walker. Marine Technology Society, Inc., 5565 Sterrett Pl, Ste 108, Columbia, MD 21044; mtspubs@erols.com; http://www.mtsociety.org. Illus., index, adv. Refereed. Circ: 3200. Vol. ends: No. 4. Online: Northern Light Technology, Inc.; OCLC Online

Computer Library Center, Inc.; ProQuest Information & Learning; H.W. Wilson. *Indexed:* AS&TI, B&AI, ChemAb, EngInd, EnvAb, ExcerptMed, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SSCI, SWRA, ZooRec. *Bk. rev.:* 1-3, 500 words. *Aud.:* Ga, Ac, Sa.

The Marine Technology Society is open to all those interested in marine technology—how it works, how to use it in science, how it affects society. Its journal is the vehicle for communicating these varied perspectives to a wide audience and hence often presents material in a more popular style. The regular issues focus on uses of technology in marine sciences with articles written by both scientists and industry researchers. Special issues address such topics as acoustic tracking of fish, ocean education, and marine sanctuary management. A useful title for general collections serving an audience with marine interests as well as academic collections supporting broad marine programs.

- 4659. *Mariners Weather Log: a climatic review of North Atlantic and North Pacific Ocean and Great Lake areas.*** [ISSN: 0025-3367] 1957. s-a. USD 13 domestic; USD 18.20 foreign. Ed(s): Robert A Luke. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, 1325 East West Hwy, Silver Spring, MD 20910; <http://www.nws.noaa.gov>. *Illus., index, adv. Circ:* 8100. *Vol. ends:* Dec. *Indexed:* AmSI, IUSGP, M&GPA, OceAb. *Aud.:* Ga, Sa.

This inexpensive print publication from the National Weather Service (NWS) is freely available online. Articles address weather forecasting, marine weather phenomena, and news from over 10,000 ships involved in the NWS Voluntary Observing Program. The meteorological content will be of interest to the maritime community, including marine institutions, scientists, and educational and research facilities. Not a core title, but a nice addition to both public and academic libraries.

- 4660. *Ocean & Coastal Management.*** Former titles (until 1992): *Ocean and Shoreline Management*; (until 1988): *Ocean Management*. [ISSN: 0964-5691] 1973. 12x/yr. EUR 1447. Ed(s): B Cicin-Sain, R W Knecht. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. *Illus., adv. Refereed. Vol. ends:* No. 44. *Microform:* PQC. *Online:* EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* EngInd, EnvAb, ExcerptMed, IPSA, M&GPA, OceAb, PAIS, PollutAb, SCI, SSCI, SWRA, WAE&RSA, ZooRec. *Bk. rev.:* 1-2, 300-600 words. *Aud.:* Ac, Sa.

This multidisciplinary, international journal covers many management issues with a focus on near shore and coastal ones. Authors are encouraged to address improvement of management practices or approaches as part of their communication. Topics include coastal zone management throughout the world, use of GIS as a management tool, and application of precautionary fisheries management. One or two issues of the six annually are dedicated to special topics on coastal management. A core title for academic collections with marine policy and management aspects.

- 4661. *Ocean Development and International Law.*** Formerly (until 1973): *Ocean Development and International Law Journal*. [ISSN: 0090-8320] 1973. q. GBP 382 print & online eds. Ed(s): Ted L McDorman. Taylor & Francis Inc., 325 Chestnut St, Ste 800, Philadelphia, PA 19016; [info@taylorandfrancis.com](mailto:info@taylorandfrancis.com); <http://www.taylorandfrancis.com>. *Adv. Refereed. Microform:* WSH. *Online:* EBSCO Publishing; Gale Group; IngentaConnect; OCLC Online Computer Library Center, Inc.; Swets Information Services. *Reprint:* PSC; WSH. *Indexed:* ABS&EES, C&ISA, CJA, CLI, CerAb, EnvAb, IAA, IBSS, ILP, IPSA, IndIslam, JEL, LRI, OceAb, PAIS, PRA, PSA, SSCI. *Aud.:* Sa.

Less specialized than *Marine Policy*, this journal contains articles on law of the sea, comparative domestic ocean law, shipping, ocean engineering, marine economics, and marine science that will be of interest to those involved in the management or utilization of ocean resources. Appropriate for libraries supporting programs in aquaculture, resource management, and environmental law.

- 4662. *Ocean Engineering.*** [ISSN: 0029-8018] 1968. 18x/yr. EUR 2467. Ed(s): Michael E McCormick, Rameswar Bhattacharyya. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United

Kingdom. *Illus., index, adv. Refereed. Circ:* 1200. *Vol. ends:* No. 28. *Microform:* PQC. *Online:* EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* AS&TI, ApMecR, C&ISA, ChemAb, EngInd, ExcerptMed, H&SSA, OceAb, PetrolAb, SCI, SWRA. *Aud.:* Ac, Sa.

This highly specialized journal covers marine engineering from ships to structures to instrumentation. Aimed at engineers, research articles range from tanker design issues to estimating breakwater damage. Issues often carry short communications on recent field work, instrument modeling, and testing. Appropriate for specialized marine and engineering collections.

- 4663. *Oceanography: serving ocean science and its applications.*** [ISSN: 1042-8275] 1988. q. Free to members. Ed(s): Larry Atkinson. Oceanography Society, 1931, Rockville, MD 20849-1931; [anne@ccpo.odu.edu](mailto:anne@ccpo.odu.edu); <http://tos.org/>. *Illus., adv. Refereed. Circ:* 2000 Paid. *Vol. ends:* No. 4. *Indexed:* M&GPA, OceAb, ZooRec. *Bk. rev.:* 2, 1,000 words, signed. *Aud.:* Ga, Ac, Sa.

This title presents a range of research, technological developments, book reviews, and current events of interest to the broad community of scientists and managers involved with ocean science. It is written for an informed and knowledgeable audience yet is highly readable with strong supporting illustrations. Issues frequently focus on a special topic such as the Indonesian seas or women in oceanography. Selected articles and features are freely available at the Oceanography Society's web site. An excellent choice for a college or public library for its general science collection.

- 4664. *Oceanography and Marine Biology: an annual review.*** [ISSN: 0078-3218] 1963. a. Ed(s): Margaret Barnes, R N Gibson. Taylor & Francis Ltd., 4 Park Sq, Milton Park, Abingdon, OX14 4RN, United Kingdom; <http://www.tandf.co.uk/books/>. *Indexed:* ChemAb, M&GPA, OceAb, SCI, ZooRec. *Aud.:* Ac.

These authoritative review articles are appropriate introductory material for students and are also useful for researchers keeping abreast of topics beyond their own field of research. The comprehensive reference lists included also serve to enhance the value of the review articles. Sample topics from a recent issue include analysis of cold seep sediments, ecology of rafting in marine ecosystems, and biofouling. An essential element in any library supporting marine biology or environmental studies undergraduate education.

- 4665. *Oceanus: reports on research at the Woods Hole Oceanographic Institution.*** Incorporates in 1994: *Woods Hole Oceanographic Institution. Reports on Research*. [ISSN: 0029-8182] 1952. s-a. USD 15 domestic; USD 18 Canada; USD 25 elsewhere. Ed(s): Laurence Lippsett. Woods Hole Oceanographic Institution, Mail Stop 5, Woods Hole, MA 02543-1050; <http://www.whoi.edu/oceanus>. *Illus., index, adv. Refereed. Circ:* 6000. *Vol. ends:* No. 2. *Microform:* PQC. *Online:* EBSCO Publishing; Florida Center for Library Automation; Gale Group; Northern Light Technology, Inc.; OCLC Online Computer Library Center, Inc.; ProQuest Information & Learning; H.W. Wilson. *Reprint:* PQC. *Indexed:* AS&TI, B&AI, BioDig, ChemAb, EnvAb, ExcerptMed, FutSurv, GSI, M&GPA, MASUSE, OceAb, PollutAb, RGPR, SCI, SSCI. *Aud.:* Hs, Ga, Ac, Sa.

The Woods Hole Oceanographic Institute (WHOI), one of the world's premier marine research organizations, resumed publication of this title in 2004 both in print and online. The articles by WHOI scientists and science writers report on current research, expeditions, and marine issues covering topics from intertidal animals to new instrumentation to detect tsunamis. Short news items are interspersed with two- or three-page articles. All are profusely illustrated. The online version has additional features such as video and digital photos. Very useful for general public collections as well as high schools and academic institutions.

- 4666. *Progress in Oceanography.*** [ISSN: 0079-6611] 1963. 16x/yr. EUR 2493. Ed(s): Charles B. Miller, Detlef R. Quadfasel. Pergamon, The Boulevard, Langford Ln, East Park, Kidlington, OX5 1GB, United Kingdom. *Illus., index, adv. Refereed. Vol. ends:* No. 4. *Microform:*



## MATHEMATICS

PQC. Online: EBSCO Publishing; Gale Group; IngentaConnect; OhioLINK; ScienceDirect; Swets Information Services. *Indexed:* ApMecR, ChemAb, EngInd, M&GPA, OceAb, PollutAb, SCI, SWRA, ZooRec. *Aud.:* Ac, Sa.

Many consider this publication to be essential reading for oceanographers. A highlight of this publication is longer, comprehensive articles that review an aspect of oceanography or offer a treatise on a developing aspect of oceanographic research. Some volumes include collections of papers and conference proceedings. This title belongs in libraries supporting oceanography programs, and will be of interest to physical and chemical oceanographers as well as marine biologists

*Remote Sensing of Environment.* See Environment and Conservation section.

4667. *Sea Technology: for design engineering and application of equipment and services in the global ocean community.* Formerly (until 1973): *Undersea Technology and Oceanology International & Offshore Technology*; Which was formed by the merger of (1961-1972): *Undersea Technology*; (1971-1972): *Oceanology International Offshore Technology*. [ISSN: 0093-3651] 1960. m. USD 45 domestic; USD 55 foreign; USD 4.50 per issue. Ed(s): Michele B. Umansky. Compass Publications, Inc. (Arlington), 1501 Wilson Blvd, Ste 1001, Arlington, VA 22209-2403. Illus., index, adv. Circ: 17000 Controlled. Vol. ends: No. 12. Microform: PQC. Online: bigchalk; Northern Light Technology, Inc.; OCLC Online Computer Library Center, Inc.; ProQuest Information & Learning; H.W. Wilson. Reprint: PQC. *Indexed:* AS&TI, ApMecR, BiolDig, C&ISA, CerAb, EngInd, ExcerptMed, H&SSA, IAA, M&GPA, OceAb, PetrolAb, PollutAb, SCI, SWRA. *Aud.:* Sa.

The monthly trade journal for marine technology and engineering combines short articles on issues and new developments with product reviews and news from the industry and the U.S. government. Articles address such topics as homeland security, toxicity sensors, and remotely operated vehicles. Appropriate for a general audience with technical and engineering interests.

*Tellus.* See Atmospheric Science section.

## Electronic Journals

*Earth Interactions.* See Atmospheric Sciences/Electronic Journals section.

## MATHEMATICS

Research Journals

J. Parker Ladwig, *Mathematics Library, University of Notre Dame, 009 Hayes-Healy Center, Notre Dame, IN 46556-5641; 574-631-3617; FAX: 574-631-9660; ladwig.1@nd.edu*

## Introduction

Mathematics can invoke a sense of dread, mystery, or logical precision. It is loved for a variety of reasons: its simple, but beautiful formulas, its problems with definite answers, its proofs that have been a model of philosophical demonstration, or its discipline of abstraction. Unfortunately, it is also a subject that builds upon itself so carefully that most advanced mathematics is inaccessible to those who have not spent years in its study.

The library has been called the mathematician's laboratory, and thus librarians should foster a budding interest and then support that interest once it has started to blossom. As a consequence, this section is divided into two parts: magazines other than research journals, and research journals. The first part draws attention to those titles that may foster a reader's interest. They should be considered for every library. The second part covers research journals, i.e., those of interest in settings where research is pursued in mathematics, not just its

instruction. Some of the largest public libraries might also find this section of interest. There is no separate section for electronic journals because most mathematics journals are available electronically, generally full-text, but at least with tables of contents.

In crafting this list of journals, several factors have been considered: a publication's consistent presence in *Magazines for Libraries* over the years, its articles being mainly in English, its reputation among mathematicians and librarians, its subscription price and price per page, its citation pattern, its publisher, and finally its ability to fill a niche unfilled by other titles. Several venerable, but pricey, research journals are included. They may not be the best value, but librarians should be aware of them. Also, specialized research journals have been excluded in order to concentrate on those titles with the broadest scope. Finally, librarians and mathematicians interested in libraries should be aware of the professional association for academic mathematics librarians: the Physics-Astronomy-Mathematics (PAM) Division of the Special Libraries Association. PAM's home page is [www.sla.org/division/dpam](http://www.sla.org/division/dpam), and PAM members are always willing to help.

## Basic Periodicals

Ems: *Teaching Children Mathematics, Mathematics Teaching in the Middle School*; Hs: *Mathematics Teacher*; Ga: *Journal of Recreational Mathematics, Math Horizons*; Ac: *American Mathematical Monthly, Bulletin of the American Mathematical Society, The Mathematical Intelligencer, SIAM Review*.

## Basic Abstracts and Indexes

*MathSciNet.*

*Chance.* See Statistics section.

4668. *Journal of Recreational Mathematics.* [ISSN: 0022-412X] 1968. q. USD 219. Ed(s): Charles Ashbacher, Lamarr Widmer. Baywood Publishing Co., Inc., 26 Austin Ave, PO Box 337, Amityville, NY 11701-0337; [info@baywood.com](mailto:info@baywood.com); <http://www.baywood.com>. Illus. Sample. Refereed. Vol. ends: No. 4. *Indexed:* GSI. *Bk. rev.:* 3-6, 300-600 words, signed. *Aud.:* Hs, Ga, Ac.

The *Journal of Recreational Mathematics* is uniquely devoted to the lighter side of mathematics. No special mathematical training is required. You will find such things as number curiosities and tricks, paper-folding creations, chess and checker brain-teasers, articles about mathematics and mathematicians, and discussion of some higher mathematics and their applications to everyday life and to puzzle-solving. It includes some occasional word games and cryptography, a lot to do with magic squares, map-coloring, geometric dissections, games with a mathematical flavor, and many other topics generally included in the fields of puzzles and recreational mathematics. Its non-textbook approach will clarify in a recreational form many of the abstract concepts wrestled with in formal classroom situations. There are several medium-length, signed book reviews in each issue. It is one of the few mathematics journals with neither the full text nor tables of contents available online. Because it makes mathematics accessible to general adult readers, though, it is a basic resource for public libraries. It may also be suitable for high school and college libraries.

4669. *Math Horizons.* [ISSN: 1072-4117] 1993. q. Members, USD 25; Non-members, USD 35. Mathematical Association of America, 1529 18th St, NW, Washington, DC 20036. *Aud.:* Hs, Ga.

*Math Horizons* is published by the MAA (see *American Mathematical Monthly*). It is a glossy, popular magazine intended "to introduce [undergraduate] students to the world of mathematics outside the classroom." There are no book reviews. Tables of contents are available online at <http://www.maa.org/pubs/mathhorizons/>. Of all the journals covering mathematics, this is probably the most accessible to a general adult audience (see also *Journal of Recreational Mathematics*). It is a basic resource for public libraries and recommended for college and academic libraries. It may also be suitable for some high school libraries.