naimo, British Columbia) as a basis for summarizing the oceanographic problems encountered in attempting to predict levels of radioactive pollution. Joel Hedgpeth (Pacific Marine Station, Dillon Beach, California), well known exponent of the dangers of disturbing an ecological balance, surprised the group by conceding that some radioactive pollution in the sea appears to be inevitable, and noted that a certain amount of radiation background may even be essential to life. However, he stressed that we should learn much more about the effects on the biota itself, as distinct from use of the biota by man, before tampering very much with the environment. O. E. Sette (Bureau of Commerical Fisheries Biological Laboratory, Stanford, California), in summarizing and correlating the highlights of the talks, pointed out that there may be one quite beneficial side effect of the radioactive pollution problem—the stimulation of many phases of instrumentation and research in oceanography, especially of research on interrelations in the biological food web in the sea.

J. F. T. SAUR

Bureau of Commercial Fisheries, U.S. Fish and Wildlife Service, Stanford, California

#### Forthcoming Events

#### October

23-24. Institute of the Aerospace Sciences and the Canadian Aeronautical Inst., Ottawa, Ont., Canada. (H. Harris, IAS, 2 E. 64 St., New York 21)

23-28. Congress of Chemical Engineering, 1st, San Juan, P.R. (R. Munoz, Apartado 47, Estación de Río Piedras, San Juan)

24-25. Shallow Water Research Conf., Gulf Coast, 1st natl., Tallahassee, Fla. (D. S. Gorsline, Oceanographic Inst., Florida State Univ., Tallahassee)

24-26. Aerospace Nuclear Propulsion, intern. symp., Las Vegas, Nev. (P. M. Uthe, Lawrence Radiation Laboratory, Univ. of California, Box 808, Livermore)

24-27. American Dietetic Assoc., 44th annual, St. Louis, Mo. (Mrs. T. Pollen, ADA, 620 N. Michigan Ave., Chicago 11, Ill.)

26-27. American Soc. of Tool and Manufacturing Engineers, Toronto, Canada. (A. Cervenka, Vanderbilt Blvd., Oakdale, L.I., N.Y.)

26-27. Instrumentation Facilities for Biomedical Research, symp., Omaha, Neb. (H. G. Beenken, Univ. of Nebraska College of Medicine, 42 and Dewey Ave., Omaha)

26-27. New Mexico Acad. of Science, Albuquerque. (K. G. Melgaard, P.O. Box 546, Mesilla Park, N.M.)

26-28. Professional Group on Electron

Devices, annual meeting, Washington, D.C. (I. M. Ross, Technical Program Chairman, Room 2A-329, Bell Telephone Laboratories, Murray Hill, N.J.)

26-30. American Soc. for Aesthetics, Detroit, Mich. (J. R. Johnson, Cleveland Museum of Art, Cleveland 6, Ohio)

27-28. Shallow Water Research Conf., Pacific Coast, 1st natl., Los Angeles, Calif. (D. S. Gorsline, Oceanographic Inst., Florida State Univ., Tallahassee)

27-29. Association of Clinical Scientists, annual, Washington, D.C. (R. P. MacFate, Secretary, ACS, 323 Northwood Rd., Riverside, Ill.)

28. American Mathematical Soc., 583rd meeting, Cambridge, Mass. (E. Pitcher, Lehigh Univ., Bethlehem, Pa.)

29-31. Photoelasticity, intern. symp., Chicago, Ill. (P. D. Flynn, Illinois Inst. of Technology, Chicago 16)

29-1. Marine Biology, intern. conf. (by invitation only), Princeton, N.J. (Mrs. E. Purcell, Interdisciplinary Conference Program, Rockefeller Center, Time & Life Bldg., New York 20)

30-1. American Oil Chemists Soc., Chicago, Ill. (W. O. Lundberg, Hormel Inst., Univ. of Minnesota, 801 16th Ave., NE, Austin)

30-1. Society of Rheology, annual, Madison, Wis. (J. D. Ferry, Univ. of Wisconsin. Madison)

consin, Madison)
31-2. Interscience Conf. on Antimicrobial Agents and Chemotherapy, 1st, American Soc. for Microbiology, New York, N.Y. (ASM, 19875 Mack Ave., Detroit 36, Mich.)

#### November

1. Rheumatic Fever, symp., New Haven, Conn. (E. A. Sillman, Connecticut Heart Assoc., 65 Wethersfield Ave., Hartford 14, Conn.)

1-3. Alkaline Pulping, 15th conf., Houston, Tex. (Technical Assoc. of the Pulp and Paper Industry, 360 Lexington Ave., New York 17)

1-3. Experimental Mechanics, 1st intern. congr., New York, N.Y. (Soc. for Experimental Stress Analysis, P.O. Box



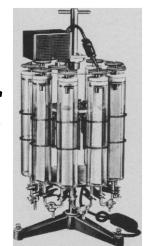
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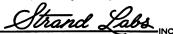
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1-3. High Magnetic Fields, intern. conf., Cambridge, Mass. (H. H. Kolm, Lincoln Laboratory, Massachusetts Inst. of Technology, Lexington 73)

I-3. Transplantation, CIBA Foundation symp. (by invitation), London, England. (CIBA Foundation, 41 Portland Pl., London, W.1)

1-4. American Soc. of Tropical Medicine and Hygiene, Washington, D.C. (R. B. Hill, 3575 St. Gaudens Rd., Miami 33, Fla.)

1-4. Society of Economic Geologists, Cincinnati, Ohio. (E. N. Cameron, Science Hall, Univ. of Wisconsin, Madison 8)

2-3. Cancer Chemotherapy, clinical symp., Washington, D.C. (T. P. Waalkes, Chemotherapy Natl. Service Center, NIH, Bethesda 14, Md.)

2-4. American Soc. for Cell Biology, 1st, Chicago, Ill. (H. Swift, Dept. of Zoology, Univ. of Chicago, Chicago 37)

2-4. Geochemical Soc., Cincinnati, Ohio. (F. R. Boyd, Jr., Geophysical Laboratory, 2801 Upton St., NW, Washington 8)

2-4. Geological Soc. of America, Cincinnati, Ohio. (F. Betz, Jr., GSA, 419 W. 117 St., New York 27)

2-4. Inter-Society Cytology Council, annual, Memphis, Tenn. (P. A. Younge, 1101 Beacon St., Brookline 46, Mass.)

2-4. National Assoc. of Geology Teachers, Cincinnati, Ohio. (D. J. Gare, Principia College, Elsah, Ill.)

2-4. Paleontological Soc., Cincinnati, Ohio. (H. B. Whittington, MCZ, Harvard Univ., Cambridge 38, Mass.)

2-4. Society for Industrial and Applied Mathematics, Washington, D.C. (Chairman, Program Committee, SIAM, P.O. Box 7541, Philadelphia 1, Pa.)

2-5. Mathematical Models in the Social and Behavioral Sciences, conf., Cambria, Calif. (F. Massarik or P. Ratoosh, Mathematical Models Conf., Graduate School of Business Administration, Univ. of California, Los Appeles 24)

California, Los Angeles 24)
3-4. Central Soc. for Clinical Research,
Chicago Ill. (J. F. Hammarsten, Veterans
Administration Hospital, 921 N.E. 13 St.,
Oklahoma City 4, Okla.)

4. Society for the Scientific Study of Sex, New York, N.Y. (H. G. Beigel, 138 E. 94 St., New York 28)

5-8. American Speech and Hearing Assoc., Chicago, Ill. (K. O. Johnson, 1001 Connecticut Ave., NW, Washington 6)

5-9. Society of Exploration Geophysicists, 31st annual intern., Denver, Colo. (C. C. Campbell, Box 1536, Tulsa 1, Okla.)

5-11. Stomatology of Peru, intern. congr., Lima, Peru. (A. Rojas, Avenue Pershing 155, San Isidro, Lima)

5-15. Japanese Chemical Engineers Soc., 25th anniversary congr., Tokyo and Kyoto, Japan. (Kagaku-Kogaku Kyokai, Shunichi Uchida, 609 Kojunsha Bldg. No. 4, 6-Chome, Ginza, Chou-Ku, Tokyo)

5-18. Latin American Phytotechnical Meeting, 5th, Buenos Aires, Argentina. (U. C. Garcia, Rivadavia 1439, Buenos Aires)

6-8. Association of Military Surgeons of the U.S., 68th annual, Washington, D.C. (R. E. Bitner, AMSUS, 1726 Eye St., NW, Washington 6)

6-8. Cell in Mitosis, 1st annual symp.,

Detroit, Mich. (L. Levine, Dept. of Biology, Life Sciences Research Center, Wayne State Univ., Detroit 2)

6-8. Chemical Engineering Div., Chemcal Inst. of Canada, Toronto, Ont. (CIC, 48 Rideau St., Ottawa 2, Ont.)

6-9. Atomic Industrial Forum-9th Hot Laboratories and Equipment Conf., Chicago, Ill. (O. J. Du Temple, American Nuclear Soc., 86 E. Randolph St., Chicago)

6-9. Southern Medical Assoc., Dallas, Tex. (R. F. Butts, 2601 Highland Ave., Birmingham 5, Ala.)

8. American Acad. of Arts and Sciences, Brookline, Mass. (J. L. Oncley, 280 Newton St., Brookline 46)

8-10. Nondestructive Testing in Electrical Engineering, conf., London, England. (Secretary, Institution of Electrical Enginees, London W.C.2)

8-11. Acoustical Soc. of America, Cincinnati, Ohio. (W. Waterfall, American-Inst. of Physics, 335 E. 45 St., New York

8-11. Institute of Management Sciences, San Francisco, Calif. (W. Smith, Inst. of Science & Technology, Univ. of Michigan, Ann Arbor)

8-11. Plasma Physics, American Physical Soc., 3rd annual, Colorado Springs, Colo. (F. Ribe, Los Alamos Scientific Laboratory, P.O. Box 1663, Los Alamos,

9-10. Operations Research Soc. of America, 20th, San Francisco, Calif. (P. Stillson, 115 Grove Lane, Walnut Creek, Calif.)

9-11. Gerontological Soc., Pittsburgh, Pa. (R. W. Kleemeier, Washington Univ., Skinker and Lindell, St. Louis 30, Mo.)

9-12. Pacific Coast Fertility Soc., Palm Springs, Calif. (G. Smith, 909 Hyde St., San Francisco 9, Calif.)

9-20. Photography, Cinematography, and Optics, 3rd intern. biennial, Paris, France. (Comité Français des Expositions, 15 rue de Bellechasse, Paris 7)

12-17. Bahamas Conf. on Medical and Biological Problems in Space Flight, Nassau, Bahamas. (I. M. Wechsler, P.O. Box 1454, Nassau)

13-14. Exploding Wire Phenomenon, 2nd intern. conf., Boston, Mass. (W. G. Chace, Thermal Radiation Laboratory, CRZCM, Geophysics Research Directorate, Air Force Cambridge Research Laboratories, Bedford, Mass.)

13-16. Magnetism and Magnetic Materials, 7th annual intern. conf., Phoenix, Ariz. (P. B. Myers, Motorola, Inc., 5005 E. McDowell Rd., Phoenix 10)

13-17. American Public Health Assoc., 89th annual, New York, N.Y. (APHA, 1790 Broadway, New York)

13-17. Gulf and Caribbean Fisheries Inst., 14th annual, Miami Beach, Fla. (J. B. Higman, Marine Laboratory, Univ. of Miami, 1 Rickenbacker Causeway, Virginia Key, Miami 49)

13-18. European Conf. on the Control of Communicable Eye Diseases, Istanbul, Turkey. (World Health Organization, Palais des Nations, Geneva, Switzerland)

14-16. American Meteorological Soc., Tallahassee, Fla. (Executive Secretary, AMS, 45 Beacon St., Boston 8, Mass.)

14-17. Corrosion in Nuclear Technology, symp., Paris, France. (European Federation of Corrosion, Société de Chimie

Industrielle, 28 rue St. Dominique, Paris

14-18. Puerto Rico Medical Assoc., Santurce. (J. A. Sanchez, P.O. Box 9111, Santurce)

15-17. Eastern Analytical Symp., New York, N.Y. (A. Rekus, EAS, Research Dept., Baltimore Gas & Electric Co., Pratt St., Baltimore, Md.)

15-18. Society of Naval Architects and Marine Engineers, annual, New York, N.Y. (W. N. Landers, SNAME, 74 Trinity

Pl., New York 6)
16-18. American Psychiatric Assoc., Milwaukee, Wis. (J. D. McGucken, 756 N. Milwaukee St., Milwaukee 2)

16-18. Etiology of Myocardial Infarction, intern. symp. (by invitation), Detroit, Mich. (T. N. James, Section on Cardiovascular Research, Henry Ford Hospital, Detroit)

16-18. Southern Thoracic Surgical Assoc., Memphis, Tenn. (H. H. Seiler, 517 Bayshore, Blvd., Tampa 6, Fla.)

16-19. American Anthropological Assoc., Philadelphia, Pa. (S. T. Boggs, 1530 P St., NW, Washington, D.C.)

17-18. Southern Soc. for Pediatric Research, Atlanta, Ga. (W. G. Thurman, Dept. of Pediatrics, Emory Univ. School of Medicine, Atlanta)

17-31. National Soc. for Crippled Chil-

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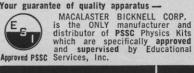
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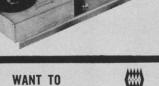


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dren and Adults, annual conv., Denver, Colo. (NSCCA, 2023 W. Ogden Ave., Chicago 12, Ill.)

19-22. International College of Surgeons, Western regional, San Francisco, Calif. (W. F. James, 1516 Lake Shore Drive, Chicago 10, Ill.)

22-27. Automation and Instrumentation, 5th conf., Milan, Italy. (Federezione delle Societa Scientifiche e Techniche di Milano, via S. Tomaso 3, Milan)

22-1. Radioisotopes in Animal Biology and the Medical Sciences, conf., Mexico City, D.F. (International Atomic Energy Agency, 11 Kärntner Ring, Vienna 1, Austria)

### Letters

#### Coconut Water

I would like to make a suggestion on coconut (Cocos nucifera, L.) terminology. Many scientists have been attracted to the use of coconut liquid endosperm because of its nutritive properties for plant tissue-culture work and sporulation of fungi. Readers are somewhat confused with the terms used to indicate the liquid found when a coconut is opened. American workers refer to it as coconut milk; others, as coconut water.

In most Asian countries the term coconut milk refers to the milky-white sap expressed from grated nut meat or solid endosperm, coconut water to the liquid endosperm. Many more uses of the latter are likely to develop. I therefore suggest, for uniformity in terminology, that only one term-coconut water—be used to refer to the liquid endosperm, in order to avoid confusion.

CONCEPCION L. VALERA College of Agriculture, University of the Philippines, College, Laguna

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#### Modern Biology

I began Commoner's article "In defense of biology" [Science 133, 1745, 1961] in the peace and quiet, almost the somnolence, of a comfortable armchair and it wasn't until the bottom of the second column that it broke upon me that biology was being defended against none other than myself. Commoner is concerned, it seems, over the attitude taken toward biology in my book, The Intelligent Man's Guide to Science, and, in particular, is horrified at my statement that "modern science has all but wiped out the border-line between life and non-life.'

In response, Commoner says: "Since biology is the science of life, any successful obliteration of the distinction between living things and other forms of matter ends forever the usefulness of biology as a separate science. If the foregoing sentence is even remotely correct, biology is not only under attack; it has been annihilated."

I could not help but be moved by the anguish clearly detectable in this cri de coeur, and I long to assure Commoner that he need not fear. Biology will not be annihilated even if the boundary between life and nonlife vanishes.

There was, after all, a time when astronomical advance removed the boundary between earth and the other planets, and that did not annihilate geology as a separate science. The advance of knowledge in biology removed the boundary between man and other species, and that has not annihilated sociology as a separate science. In fact, both geology and sociology became more meaningful when both could draw upon and, in turn, enlighten, a broader field of inquiry.