

SCIENCE

17 April 1959

Volume 129, Number 335

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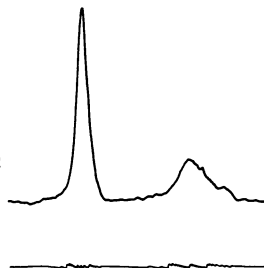
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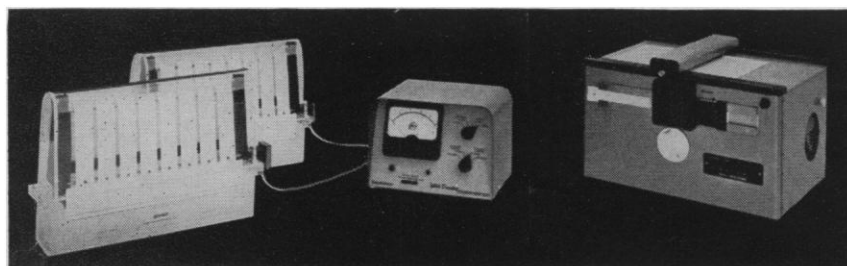
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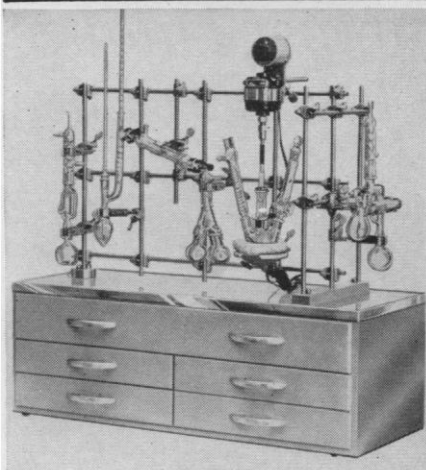
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Letters

Presentation before Publication

It was a surprise to me to find that the editorial entitled "Behind the Times" [*Science* 129, 301 (1959)] suggested a journal policy of refusal to release any information to newspaper reporters prior to publication of an article. In many cases the researcher, or member of the research team, has already released such information in full by presentation at national conventions, regional meetings, or state-level programs. Large professional gatherings have established press rooms where abstracts or manuscripts originally submitted to the program committee have been made available to journalists. To further temper journalistic extrapolation with scientific caution, interviews have been arranged between speakers and reporters.

The editorial writer noted "... that journals are not the only means of communication in the scientific world. ... Consequently, on occasion a reporter will come upon a piece of research that he finds newsworthy, but which ... has not yet appeared [in print]." The phrase *on occasion* seems too limited; often or frequently would seem to be better choices.

A previous editorial [*Science* 127, 1145 (1958)] reminded us that science did not exist until communication was established among scientists. Denial of scientific information to the wide audience covered by newspapers may possibly hamper the development of science. For surely scientists today do not wish to communicate exclusively with their colleagues. Hyperspecialization has made that undesirable. What scientists read in their professional literature may contain no more information than what they hear at their periodic assemblages. Since reporters are encouraged to attend many such gatherings, it seems churlish to deny them access to the contents of journals prior to publication.

The responsibility for an accurate report lies with the scientist. The responsibility for an accurate interpretation lies with the reporter, whether he reads a manuscript, hears a paper, or studies an article.

DELL LEBO

Child Guidance and Speech Correction Clinic, Jacksonville, Florida

The Word "Ecology"

It has been stated by a number of historians of science that the word *ecology* was coined by the German naturalist and Darwinian Ernst Heinrich Haeckel (1834-1919). Indeed, the *Oxford English Dictionary* attributes the first use of the word to Haeckel's *The History of Creation* (1875), quoting both from the

preface of this work (in translation, "The great series of phenomena of comparative anatomy and ontogeny . . . chorology and oecology") and from Haeckel's *Evolution of Man* (1879) ("All the various relations of animals and plants to one another and to the outer world, with which the Oekology of organisms has to do . . ."). The *Encyclopedia Britannica* says in its article on "Ecology": "In 1869 Ernst Haeckel stated that the individual was a product of co-operation between the environment and organismal heredity. This relationship was called 'oecology'." Paul B. Sears in his book *Charles Darwin: The Naturalist as a Cultural Force* (Scribner's, 1950) writes (page 42): "Haeckel's grasp of the problems of living nature is suggested by the fact that he coined the word 'oecology,' now 'ecology,' to cover the study of the broad configurations which exist within and among communities of organisms," and in the same work (page 56) Sears pins down the date of this coinage to the year 1866. George Sarton, in *A History of Science* (Harvard University Press, 1952), repeats this attribution to Haeckel.

Recently, in reading *The Correspondence of Henry David Thoreau*, edited by Walter Harding and Carl Bode (New York University Press, 1958), I came across a use of the word *ecology* antedating Haeckel's by several years. In a heretofore unpublished letter to his cousin George Thatcher, of Bangor, Maine, dated 1 January 1858, Thoreau wrote: "Mr Hoar is still in Concord, attending to Botany, Ecology, &c with a view to make his future residence in foreign parts more truly profitable to him." Edward Hoar was Thoreau's Concord neighbor and his companion on several trips, including the famous journey to the Maine woods in 1857. The casualness with which Thoreau used the word *ecology* would certainly indicate that it was not of his own mintage and that his cousin would understand it. The inference, too, is that Hoar knew it also.

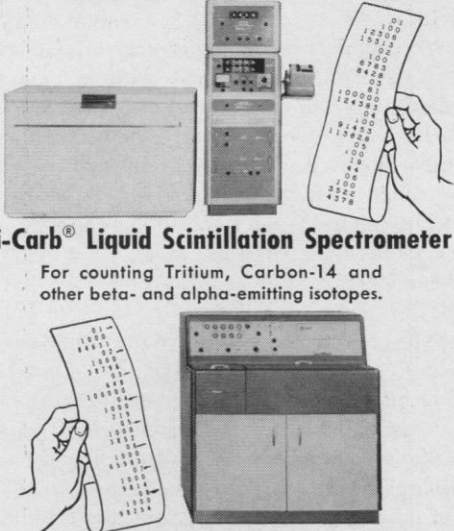
Thoreau was a wide reader in the literature of natural history. He had read *The Voyage of the Beagle* and quotes it in his *Journal*. We have no record that he had read Haeckel. In fact, in 1858 Haeckel was only 24 years old, probably then studying medicine, with his biological career still ahead of him.

So, who did coin the word *ecology*? And where did Thoreau and Hoar pick up the word? It would be interesting to know, for Thoreau was certainly an ecologist and possessed a fundamental understanding of the principles of ecology, though it did not attain the stature of a recognized science until long after his day.

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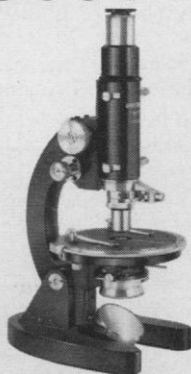
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The American Geophysical Union is host for the International Association of Geodesy's Symposium on Electronic Distance Measuring Equipment that is to take place in Washington, D.C., on 5-12 May. Chauncey D. Leake, president-elect of the AAAS, will deliver the keynote address at the opening session. The technical sessions will be held in the Commerce Building. For information, write to Charles A. Whitten, Coast and Geodetic Survey, Washington 25, D.C.

AEC Test Reactor Meeting

The Atomic Energy Commission will conduct an unclassified technical information meeting on the construction, operation, and use of test reactors for representatives or organizations engaged in, or having expressed interest in, AEC and industrial test-reactor programs. The meeting will be held at the commission's National Reactor Testing Station, Idaho Falls, Idaho, 13-15 May.

Technical papers will be presented by representatives of the commission and its Argonne, Brookhaven, and Oak Ridge National Laboratories; and by representatives of the Battelle Memorial Institute, Phillips Petroleum Company, General Electric Company, Westinghouse Electric Corporation, and Pratt and Whitney Division of United Aircraft Corporation.

The meeting agenda also includes a panel discussion on the future use of test reactors in experimental programs. Commissioner John F. Floberg will be the guest speaker at a dinner to be held on 13 May.

The AEC's Idaho Operations Office and the Phillips Petroleum Company are cosponsoring the meeting. Inquiries should be sent to: Allan C. Johnson, Manager, Idaho Operations Office, Atomic Energy Commission, P.O. Box 2108, Idaho Falls, Idaho.

Forthcoming Events

May

17-20. American Inst. of Chemical Engineers, 40th natl., Kansas City, Mo. (F. J. Van Antwerpen, AICE, 25 W. 45 St., New York 36.)

17-21. American Ceramic Soc., 61st annual, Chicago, Ill. (C. S. Pearce, ACS, 4055 N. High St., Columbus 14, Ohio.)

17-21. Institute of Food Technologists, 19th annual, Philadelphia, Pa. (C. S. Lawrence, IFT, 176 W. Adams St., Chicago 3, Ill.)

17-23. Antibiotics, intern. symp., Prague, Czechoslovakia. (M. Heřmanský, Antibiotics Research Inst., Roztoky near Prague, Czechoslovakia.)

17-23. Mass Spectrometry, 7th, Los Angeles, Calif. (A. G. Sharkey, Jr., U.S.

Bureau of Mines, 4800 Forbes Ave., Pittsburgh 13, Pa.)

18-20. Instrumental Methods of Analysis, 5th natl. symp., Houston, Tex. (H. S. Kindler, Director of Technical and Educational Services, ISA, 313 Sixth Ave., Pittsburgh 22, Pa.)

19-23. American Assoc. of Mental Deficiency, Milwaukee, Wis. (N. A. Dayton, Mansfield State Training School & Hospital, Mansfield, Depot, Conn.)

20-22. Education of the Scientist in a Free Society, conf., Milwaukee, Wis. (A. B. Drought, College of Engineering, Marquette Univ., 1515 W. Wisconsin Ave., Milwaukee 3.)

21-23. American Assoc. for the History of Medicine, 32nd annual, Cleveland, Ohio. (Miss E. H. Thomson, Yale Univ. School of Medicine, New Haven, Conn.)

21-27. Veterinary Cong., 16th intern., Madrid, Spain. (J. Jensen, General Secretary of Permanent Committee, Belstraat 168, Utrecht, Netherlands; or W. A. Hagan, Dean, Cornell Univ., New York State Veterinary College, Ithaca, N.Y.)

24-27. Chemical Inst. of Canada, 42nd annual conf., Halifax, Nova Scotia. (Chemical Inst. of Canada, 18 Rideau St., Ottawa 2, Ontario.)

24-29. American Tuberculosis Assoc., Chicago, Ill. (Mrs. W. B. White, 1790 Broadway, New York 19.)

24-29. Social Welfare, natl. conf. and annual forum, San Francisco, Calif. (National Conference on Social Welfare, 22 W. Gay St., Columbus 15, Ohio.)

25-27. American Gynecological Soc., Hot Springs, Va. (A. A. Marchetti, 3800 Reservoir Rd., NW, Washington 7.)

25-27. American Soc. for Quality Control, Cleveland, Ohio. (L. S. Eichelberger, A. O. Smith Corp., Milwaukee, Wis.)

25-27. Chemical Inst. of Canada, 42nd annual conf., Halifax, Nova Scotia. (Chemical Inst. of Canada, 18 Rideau St., Ottawa, Ontario, Canada.)

25-27. Telemetry, natl. conf., Denver, Colo. (R. Schmidt, AVCO Mfg. Co., 201 Lowell St., Wilmington, Mass.)

25-28. Smoking and Lung Cancer, and Pulmonary Emphysema, symps., American Trudeau Soc., Chicago, Ill. (H. W. Harris, Medical Sessions Committee, ATS, 1790 Broadway, New York 19.)

25-29. Transistors and Associated Semiconductor Devices, intern. conv., London, England. (Institution of Electrical Engineers, Savoy Pl., London, W.C.2.)

25-31. Electroheat, 4th intern. cong., Stresa, Italy. (International Union for Electroheat, 14, rue de Stäel, Paris 15^e, France.)

26-29. American College of Cardiology, Philadelphia, Pa. (P. Reichert, 480 Park Ave., New York 22.)

27-28. Legal Environment of Medical Science, 1st natl. conf. (Natl. Soc. for Medical Research and Univ. of Chicago), Chicago, Ill. (Natl. Soc. for Medical Research, 920 S. Michigan Ave., Chicago 5.)

28-30. American Ophthalmological Soc., Hot Springs, Va. (M. C. Wheeler, 30 W. 59 St., New York 19.)

29-30. International Assoc. for Bronchology, 9th cong., Madrid, Spain. (J. Abello, IAB, Lagascas 13, Spain.)

30-5. Applications of Atomic Energy to the Petroleum Industry, symp., 5th

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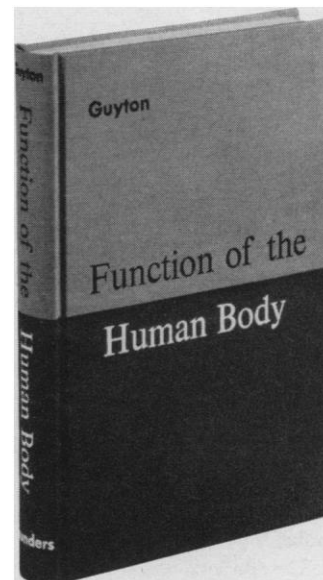
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World Petroleum Congress, New York, N.Y. (C. E. Davis, General Secretary, 5th World Petroleum Congress, 527 Madison Ave., New York 22.)

31-3. Special Libraries Assoc., 50th annual conv., Atlantic City, N.J. (Miss M. E. Lucius, 31 E. 10 St., New York 3.)

31-5. Industrial Research Conf., 10th annual, New York, N.Y. (R. T. Livingston, Director, IRC, 409 Engineering, Columbia Univ., New York 27.)

June

1-3. Evolution, symp., annual, Saskatoon, Saskatchewan, Canada. (Mrs. L. C. Metivier, Royal Soc. of Canada, Natl. Research Bldg., 100 Sussex Drive, Ottawa, Ontario.)

1-4. American Dermatological Assoc., Atlantic City, N.J. (W. M. Sams, 25 Southeast Second Ave., Miami, Fla.)

1-4. Spectroscopy, 10th annual symp., Chicago, Ill. (G. W. Bailey, Borg-Warner Research Center, Des Plaines, Ill.)

1-5. International Silk Assoc., cong., Munich, Germany. (H. Bonvallet, 25, Place Tolozan, Lyon 1, France.)

1-6. International Commission for Northwest Atlantic Fisheries, 9th annual (by invitation), Montreal, Canada. (ICNAF, Forest Bldg., Carleton St., Halifax, Nova Scotia.)

2-6. American Rheumatism Assoc., Washington, D.C. (E. F. Hartung, 580 Park Ave., New York 21.)

2-6. Rheumatic Diseases, 2nd Pan

American cong., Washington, D.C. (R. T. Smith, West Point, Pa.)

3-5. Cellular Aspects of Immunity, symp. (by invitation), Royaumont (near Paris), France. (G. E. W. Wolstenholme, Ciba Foundation, 41 Portland Pl., London, W.1, England.)

3-7. American Assoc. of Bioanalysis, Cincinnati, Ohio. (L. D. Hertert, 490 Post St., Room 1049, San Francisco 2.)

3-7. American College of Chest Physicians, Atlantic City, N.J. (M. Kornfeld, 112 E. Chestnut St., Chicago, Ill.)

3-10. Quantitative Biology, symp., 24th, Cold Spring Harbor, N.Y. (M. Demerec, Director, Biological Lab., Cold Spring Harbor, N.Y.)

4. Fine Structure as Related to Absorption, Synthesis and Transport in the Gastrointestinal Tract, symp., Atlantic City, N.J. (E. C. Texter, Gastroenterology Research Group, Medical School, 303 E. Chicago Ave., Northwestern Univ., Chicago 11, Ill.)

4. Petroleum Geochemistry, symp., New York, N.Y. (E. G. Baker, Esso Research and Engineering Co., P.O. Box 51, Linden, N.J.)

4-5. American Geriatrics Soc., Atlantic City, N.J. (R. J. Kraemer, 2907 Post Rd., Warwick, R.I.)

4-6. Endocrine Soc., 41st annual, Atlantic City, N.J. (H. H. Turner, 1200 N. Walker, Oklahoma City, Okla.)

4-7. American Medical Womens Assoc., Atlantic City, N.J. (Miss L. T. Majally, 1790 Broadway, New York 19.)

4-7. American Therapeutic Soc., Atlantic City, N.J. (O. B. Hunter, Jr., 915 19 St., NW, Washington 6.)

4-9. Electrolytes, intern. symp., Trieste, Italy. (Societa Italiana per il Progresso delle Scienze 7, Rome, Italy.)

5-7. American College of Angiology, 5th annual, Atlantic City, N.J. (A. Halpern, 11 Hampton Court, Great Neck, N.Y.)

5-7. American Gastroenterological Assoc., and American Gastroscopic Soc., annual, Atlantic City, N.J. (H. M. Pollard, University Hospital, Ann Arbor, Mich.)

6. American Acad. of Tuberculosis Physicians, Atlantic City, N.J. (O. S. Levin, P.O. Box 7011, Denver 6, Colo.)

6. International Cardiovascular Soc. (North American Chapter), Atlantic City, N.J. (P. T. DeCamp, 3503 Prytania St., New Orleans, La.)

6-7. American Diabetes Assoc., Atlantic City, N.J. (E. Paul Sheridan, 1 E. 45 St., New York 17.)

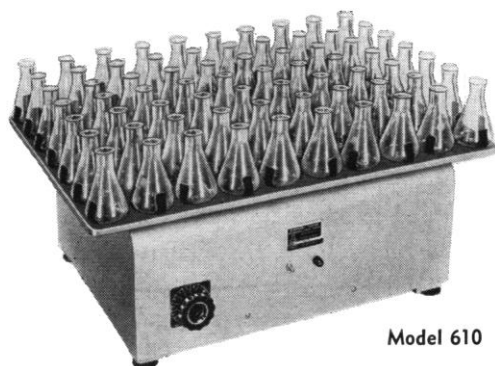
6-7. Society of Investigative Dermatology, Inc., 20th annual, Atlantic City, N.J. (H. Beerman, 255 S. 17, Philadelphia 3, Pa.)

6, 20, and 27. Recent Advances in Medical Technology, symp., Staten Island, N.Y. (N. Colosi, Wagner College, Staten Island, N.Y.)

7-11. American Soc. of Heating and Air Conditioning Engineers, semi-annual, Vancouver, B.C., Canada. (A. V. Hutchinson, ASHACE, 62 Worth St., New York 13.)

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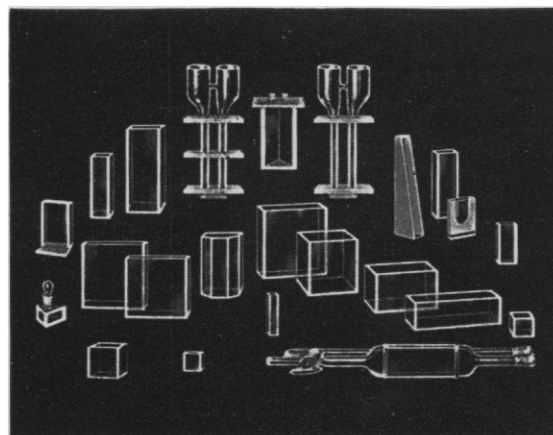


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