

films OF THE WEEK

SEEDS OF DISCOVERY. 16mm, color, sound, 28 min. New space science projects for the 1970's are illustrated in film. The fundamental contributions of Copernicus, Galileo, and Newton to man's understanding of his solar system are described, and the rapid advancement of space science within the past decade through the use of scientific satellites is emphasized. Through animation, the film presents plans for Mariner flybys of the planets Mars and Mercury in the early 1970's, and the use of Pioneer probes to study the planet Jupiter and interplanetary space. The proposed "Grand Tour" of some of the more distant planets in our solar system by a single spacecraft during the late 1970's is also featured. Plans for an astronomy study with a large telescope on a manned skylab, and for the GARP international atmospheric research program are briefly described. Audience: general. Free loan from NASA field libraries or from NASA Headquarters, Code FAD-2, Washington, D.C. 20546.

Circle No. 123 on Reader Service Card

CHEMICAL EDUCATION SERIES. Twenty 8mm film loops four minutes each in color to be used by college chemistry departments to supplement classroom and laboratory instruction. Produced by W. H. Slabaugh, Professor of Chemistry, Oregon State University. Titles include: Titration; Crystal Structures of Metals; Phase Diagram for BI-CD Alloy; Atomic and Bonding Orbitals; The Sartorius Balance 2400; The Mercury Beating Heart; Corrosion I—Filliform Corrosion; Corrosion II—Hydrogen Embrittlement; Corrosion III—Aluminum; A Model of the Kinetic-Molecular Concept; The Critical Point; Colorimetry—Part I; Colorimetry—Part II; The pH Meter; Reaction Rates; On Writing Equations—I; On Writing Equations—II; Energy Cycles; Streaming Birefringence; and Hydrogen Atom. Purchase Standard 8mm cartridges \$17, Super 8mm \$19, and Kodak cartridges \$19 each from John Wiley and Sons, 605 3rd Ave., New York, N.Y. 10016.

Circle No. 124 on Reader Service Card

YOUR PLACE IN THE NUCLEAR AGE. 16mm, color, sound, 26 min. Gives the student a picture of the professional environment in which he would be working if he chose a career in nuclear science or engineering. The three major employment areas covered are: contractors' laboratories of the U.S. Atomic Energy Commission, commercial nuclear industries, and colleges and universities. Each has a need for trained manpower in nuclear science and technology. The need for creative ideas is essential to the development of nuclear energy in both basic and applied research. The professional person does many things, including the preparation of reports for scientific and technical journals, attending national or international meetings, and maintaining contacts with other specialists in his field. Audience: high school, college, adult. Purchase and loan information from Audio-Visual Branch, U.S. Atomic Energy Commission, Washington, D.C. 20545.

Circle No. 125 on Reader Service Card

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor or circle the appropriate number on the Reader Service Card.

to the editor

A small point

In general I think Richard Gilluly's article, "Eutrophication speeded by man," (SN: 7/4, p. 17) is very good. It brought out the main points that should be made, and it is related in a very timely way to current public discussion. In a few places I would say things a little differently, but these are small points.

One point about Lake Washington: It is not quite back to 1950 in terms of transparency, which is what the public notices, but it is very much better than it was.

W. J. Edmondson
Professor of Zoology
University of Washington
Seattle, Wash.

I read with particular interest Richard H. Gilluly's article "Eutrophication speeded by man" and noted reference to the work that we are doing at Lake Tahoe which is largely concerned with accelerated eutrophication and includes our crayfish experiments. Attached is my subscription check as proof positive of my approval!

Dr. Sture Abrahamsson, formerly a Fernstrom fellow here at Davis and now supported by the Fisheries Research Board of Sweden, has joined me again this summer to further our crayfish experiments and continue the transport of a breeding stock of the California Crayfish—*Pacifastacus leniusculus*—for reestablishing their important crayfish industry which has been devastated by a plague to which our crayfish is highly resistant.

In general, I felt that Gilluly's report was well balanced and was glad to see Dr. Hasler's cautionary comments on NTA (nitrotriacetate) as a phosphate substitute in detergents. We are currently testing it as a bio-stimulant in cultures of Lake Tahoe, Castle Lake, and Clear Lake waters. Since Tahoe is

more deficient in nitrogen than phosphorus, it will be interesting to see what develops from these tests. The Tahoe eutrophication problem is particularly serious because the lake has a water retention time of about 700 years. Once eutrophic, it would be virtually impossible to rejuvenate since there is so little inflow and outflow. The advent of sewage export has been an important step in the conservation of the unique lake, but siltation from careless road building and subdivision is bringing in quantities of nutrients in some areas of the lake and is still to be controlled.

Charles R. Goldman
Professor of Zoology
University of California
Davis, Calif.

Lasers

Lawrence Kuhn, P. F. Heidrich, B. A. Scott and I were happy to see the article "Laser light into thin films," (SN: 7/25, p. 66) describing our work on the grating coupler. It was a good description of this work.

Dr. Mark L. Dakss
Thomas J. Watson
Research Center, IBM
Yorktown Heights, N.Y.

Hawaii's ice

We were pleased that you selected our NATURE article, "Fossil ice in Hawaii?" as one of the items in SCIENCE NEWS (SN: 6/13, p. 579). We are excited about the alpine region of Mauna Kea and feel that it presents unique opportunities for many interdisciplinary geophysical studies.

Alfred H. Woodcock
University of Hawaii
Honolulu, Hawaii

Address communications to Editor,
Science News, 1719 N Street, N.W.
Washington, D. C. 20036

SCIENCE NEWS

Copyright © 1970 by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Reproduction of any portion of SCIENCE NEWS is strictly prohibited.

SUBSCRIPTION DEPARTMENT
231 WEST CENTER STREET
MARION, OHIO 43302

Subscription rate: 1 yr., \$7.50; 2 yrs., \$13.50; 3 yrs., 19.50. Special trial offer: 39 weeks, \$3.97. Single copy, 25 cents. \$1.00 per year for foreign postage. Change of address: Three weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. Printed in U.S.A. Second class postage paid at Washington, D.C. Established as Science News Letter © in mimeograph form March 13, 1922. Title registered as trademark U.S. and Canadian Patent Offices. Indexed in last Science News of June and December, in Reader's Guide to Periodical Literature, Abridged Guide and the Engineering Index. Member of Audit Bureau of Circulation. UNSOLICITED MANUSCRIPTS will not be returned unless accompanied by a stamped, self-addressed envelope. Published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington, D.C. 20036. North 7-2255. Cable Address: SCIENSERV.

ADVERTISING STAFF

Director: EARL J. SCHERAGO Advertising Sales Manager: RICHARD L. CHARLES
Address all advertising to Scherago Associates, 11 West 42nd St., New York, N.Y. 10036.

Sales: New York, N.Y. 10036: Robert S. Bugbee, 11 W. 42 St. (212-PE 6-1858); Scotch Plains, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); Medford, Mass. 02052: Richard M. Ezequelle, 4 Rolling Lane (617-444-1439); Chicago, Ill. 60611: Herbert L. Burkland, Room 2107, 919 N. Michigan Ave. (312-DE 7-4973); Beverly Hills, Calif. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772).