

# films OF THE WEEK

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.

**APOLLO 9: THE SPACE DUET OF SPIDER AND GUMDROP.** 16mm, color, sound, 28½ min. With special photography and music, the film illustrates highlights of the first earth-orbital rendezvous and docking of the Apollo Lunar Module (Spider) and the Apollo Command Module (Gumdrop). Special slow-motion sequences, views of the astronauts in training, and dramatic perspectives of the Saturn V launching and the spacecraft maneuvers in orbit, provide an intimate portrait of the missions. Follows the astronauts through training experiences, press interviews, launch preparations, on-board activities and recovery. Audience: schools, civic and professional organizations. Free loan from nearest NASA research center or from Headquarters, National Aeronautics and Space Administration, Code FAD, Washington, D. C. 20546.

**COMPUTER ANALYSIS OF ELECTROCARDIOGRAMS—M-1477-X.** Demonstrates the use of computerized, automated systems to analyze and diagnose electrocardiograms and spiograms. Shows the data acquisition unit—a four-wheel cart that records the signals on tape and transmits them by telephone to the appropriate computer center. Within 15 seconds after the computer has recognized the waveforms of all the leads, it integrates the values, prints out an interpretation, and returns it to the physician or the hospital. Audience: physicians, hospitals, medical schools, technicians, hospital administrators, scientists. Purchase information from DuArt Film Labs., 245 W. 55th St., New York, N.Y. 10019, or free loan from National Medical Audiovisual Center (Annex), Chamblee, Ga. 30341, Attn: Film Distribution.

**EXPLORING THE ATOMIC NUCLEUS.** 16mm, color, sound, 13½ min. Describes particle accelerators—the basic tools of high-energy physics used to explore the atomic nucleus. Shows some of the recent discoveries that physicists have made concerning nuclear structure, the basic equipment used, and how the resulting data is analyzed. Shows concepts of atomic structure, how the atomic nucleus is bombarded with other particles, how particle interactions are detected, and the analysis via bubble chamber photographs. Audience: high school. Purchase \$162.50 from Coronet Films, 65 E. South Water St., Chicago, Ill. 60601, or free loan from AEC field libraries or from Audio-Visual Branch, Department of Public Information, U. S. Atomic Energy Commission, Washington, D. C. 20545.

**THE FLIGHT OF APOLLO 7. NQ-187-1968.** 16mm, color, sound, 14 min. A chronicle of the major achievements in the first manned flight of a Saturn V/Apollo vehicle, including the launching, on-board activities of the astronauts, re-entry and recovery of the spacecraft. Audience: general. Free loan from NASA field libraries, or from National Aeronautics and Space Administration, Code FAD-2, Washington, D.C. 20546.

**LIFE IN THE EARLY SEAS: INVERTEBRATES AND FISHES.** 16mm, color, sound, 11 min. Touches on the dynamics of fossil formation and explains how evidence from fossils is used by scientists to learn about life long ago. Evolutionary changes in the development of invertebrates and fishes are illustrated and related to present-day species. Audience: grades 4-9. Purchase \$150 or rental \$10 from McGraw-Hill Films, Dept. DF, 330 W. 42nd St., New York, N.Y. 10036.

**MATTER INTO ENERGY.** 16mm, color, sound, 9 min. Introduces basic concepts concerning the structure of matter and illustrates the processes of fission and fusion. Animation is used to make these concepts clear. A special feature of the film is its explanation of the binding energy that holds together the protons and neutrons in the nucleus of the atom. Audience: grades 5-8. Purchase \$130 or rental \$10 from McGraw-Hill Films, Dept. DF, 330 W. 42nd St., New York, N.Y. 10036.

**STRATA: THE EARTH'S CHANGING CRUST.** 16mm, color, sound, 10 min. In many places, we see that the ground beneath our feet is made of strata—layers of rock. Originally formed from flat layers of sediment deposited on the sea bottom, strata often have faults or folds. From faults, we learn that there are great pressures inside the earth, pressures strong enough to crack rock. Folds result from pressure applied slowly over tens of thousands of year. Strata, and the folds and faults they often contain, are evidence of change in the earth's crust. Audience: high school. Purchase \$125 from Film Associates, 11559 Santa Monica Blvd., Los Angeles, Calif. 90025.

## LETTERS

# to the editor

### Temporarily down under

We are pleased to see Dr. Jon G. Ables' work at Parkes, relative to radio observations of Scorpio X-1, reported (SN: 3/29, p. 310).

But Australian, Jon is not. He is a native of Oklahoma, a doctoral graduate of Oklahoma State University who did his dissertation research at the Southwest Center for Advanced Studies; and, a post-doctoral at the University of Adelaide, South Australia.

*Alfred T. Mitchell  
Southwest Center for  
Advanced Studies  
Dallas, Tex.*

### Not expert

Dr. Long is just as much at fault for the impasse at the NSF as anyone else (SN: 5/3, p. 421). Since the job is nonpolitical, Dr. Long has no right to push his anti-ABM views with the weight of the chairmanship of the NSF. Also, since Dr. Long is a chemist, not a Sovietologist, his predictions are his personal opinions only, not expert deductions from facts.

*Andreis Baidins  
Wilmington, Del.*

### An old issue indeed

On my last time-travel jaunt among old bound volumes (it was *MUNSEY'S MAGAZINE* this time, February 1896 issue, p. 637) I came across the following:

"It seems probable that the United States—the most progressive of nations, as we term ourselves with much pride and some justice—will be the last to adopt the modern metric system of weights and measures. Only three considerable countries have failed to undertake the reform that has been found so valuable by the rest of the civilized world. Conservative England is one of

them, but she has almost made up her mind to accept the new system, which is likely to be legalized during the present session of Parliament. Russia is another, but an imperial ukase may at any moment assimilate her commercial units to those of her neighbors. Only in America is there no apparent prospect of an early end to the complications of existing standards. And yet such a change would be a greater boon to the world of business than was the substitution of dollars and cents for pounds, shillings and pence.

"It is said that when England accepts the metric system, France will return the compliment by adopting Greenwich time, thereby establishing a single time standard for navigators all over the world. All such steps toward uniformity are advances of civilization, and should find favor with Americans. It is anomalous that we should cling to the confusions of pounds and tons, and of an acre whose side is no precise number of yards, when the Japanese and the Turks are using a decimal system that is simple, rational and convenient."

*Helen Thilenius  
St. Louis, Mo.*

### Exciton fission

Your description of our work on exciton fission (SN: 4/19, p. 378) was the best that has appeared in any of the numerous places that have reported our discovery. Your article was based on a direct reading of the original paper and this involves a surprising degree of sophistication.

You are to be congratulated for doing a first-rate job. Thank you for your interest.

*Dr. Martin Pope  
Associate Director  
New York University  
Radiation and Solid  
State Laboratory*

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

## SCIENCE NEWS

Copyright © 1969 by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036 Republication of any portion of *SCIENCE NEWS* is strictly prohibited.

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. No charge for foreign postage. Change of address: Three weeks' notice is required. Please state exactly how magazine is 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 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**  
L. D. Young, Advertising Director, *SCIENCE NEWS*, 1719 N St., N.W., Washington, D.C. 20036, Phone 202-667-8945.

Advertising Representatives: *SCRIPPS-HOWARD NEWSPAPERS*. General Advertising Department: 200 Park Ave., New York, N.Y., TN 7-5000; 400 N. Michigan Ave., Chicago, Ill., SU 7-3355; Suite 211, Braniff Building, Dallas, Tex., PL 7-3847; 908 E. Northland Tower, Southfield, Mich.; 444-4595; 6363 Wilshire Blvd., Los Angeles, Calif., OL 3-0026; Room 1522, Philadelphia National Bank Building, Philadelphia, Pa., LO 3-6275; 100 California St., San Francisco, Calif., 989-5570; Suite 417, 3384 Peachtree Rd., N.E., Atlanta, Ga., 261-1571.