

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.

DRUG ABUSE: A CALL TO ACTION. 16 mm, color, sound, 27 min. Shot on location in and around Greenwich, Conn., the film features high school students, ex-addicts, police officers, parents, teachers and physicians. The result is a startling revelation on drug use and experimentation among teen-agers in a representative middle-class community. Audience: teen-agers, parents, teachers. Purchase or rental information from Association Instructional Films, 600 Madison Ave., New York, N.Y. 10022. (Produced in cooperation with the American Social Health Association.)

AT HOME WITH SWITCHES. 16mm, b&w, sound, 28 min. With a special peg board and unitized components, switches are quickly connected to various mechanisms. Series, parallel, single pole, double throw, and combined single pole double throw switches are used to control a light, buzzer and motor. As each type is demonstrated, its household counterpart is revealed. The complex switching that occurs at the "turn of a knob" is illustrated with a homemade wafer switch and the inside of an electronic meter. A diagram of the tuner of a television set shows the switching that occurs when channels are changed. Audience: upper elementary, junior high. Purchase \$130 from Prism Productions, 220 E. 23rd St., New York, N. Y. 10010. (Part of Inquiries in Science Series with Mr. Wizard.)

ATOMIC STRUCTURES AND SPECTRAL TRANSITIONS. 16mm, color, sound, 27 min. Shows the basic theories of atomic structure and interaction with light radiation. The Bohr atom. Positive central nucleus. Negative electrons orbiting around the nucleus in stationary energy states, forming a discontinuous succession. Fundamental state. Excited states. Transitions between states by absorption and emission of monochromatic light. Zeeman effect. Audience: high school, college physics. Loan with \$5 service charge from Society for French American Cultural Services and Educational Aid, 972 Fifth Ave., New York, N.Y. 10021.

THE ATOM UNDERGROUND. 16mm, color, sound, 20 min. The story of a new, effective way for man to recover valuable natural resources locked deep beneath the surface of the earth. Using the explosive power of the atom in a method called underground engineering, the AEC and private industry are investigating the feasibility of the following "Plowshare" techniques illustrated in the film: stimulating the flow and production of natural gas; increasing oil reserves and increasing oil flow through oil-bearing rock; providing underground storage areas for gas, oil, water, or wastes; "mining" copper and other minerals by underground leaching; and in-place recovery of oil from oil shale. Audience: general. Purchase \$240 from Handel Film Corp., 8730 Sunset Blvd., W. Hollywood, Calif. 90069, or free loan information from Audio-Visual Branch, Division of Public Information, U.S. Atomic Energy Commission, Washington, D.C. 20545.

to the editor

Blood substitute

Your note entitled "Promising Blood Substitute" (SN: 12/27, p. 595) describing our hemoglobin solution experiments, was accurate, complete and descriptive. Our work with this material is progressing nicely.

Dr. S. F. Rabiner
Michael Reese Hospital and
Medical Center
Chicago, Ill.

Going to Mars

After reading Dr. Walter Orr Roberts' comment (SN: 1/3, p. 6)—he said he hoped man would not go to Mars, "now or ever"—I can only express my relief that he is the retiring president of the American Association for the Advancement of Science.

Conservatism is one thing, but grinding one's own ax at the expense of girdling science and progress is another. I expect Roberts felt the same way about aviation or the automobile, yet probably uses them both.

The advancement of science does not benefit from "now-or-ever" restricted, biased attitudes. Science and society as a whole will benefit more from the space activities of NASA (and the aeronautics as well) in the next five years than "earth application projects" could have hoped to accomplish in 500 years without utilizing the advancements generated by the intensive benefits of the research and development of the entire space program.

The main thrust of the space effort must be directed toward space, or man will never get off the ground, both literally and figuratively speaking. Earth applications will automatically result as they have in the past as a by-product and co-product of space efforts. Technology and all related sciences, both physical and social, will benefit most, applying

the advances of space research to their problem areas. In 2,000 years the social sciences and all earth projects have been grounded. The space program, especially the exploration of Mars and our solar system with the development of all the sophisticated hardware that this goal enhances, will allow the planet earth to pull itself up by its own bootstraps.

Fortunato Comunale
Project Director
Burwater Technical Corp.
Carle Place, N.Y.

Wrong head

The article dealing with the dissent at the American Association for the Advancement of Science meeting in Boston (SN: 1/3, p. 5) named John Naugle as the head of the National Aeronautics and Space Administration. Mr. Naugle is not the head of NASA. Dr. Thomas O. Paine is.

Susan E. Kulchar
Washington, D.C.

(The curse of a dropped qualifier. Naugle is Associate Administrator, Office of Space Science and Applications, National Aeronautics and Space Administration. Ed.)

Honored

I am very much honored by your mention of my having received a Lasker Award in your publication (SN: 11/15, p. 448). I greatly appreciate the dignity and businesslike tone of this article.

George C. Cotzias, M.D.
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