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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.

GRAPHS AT WORK. 16mm, b&w. sound, 28 min. A graph with a million-year time base shows the animals that have existed on earth. An hour/minute graph produced by a recorder and thermocouple indicates heat variations around a candle flame. A photograph is shown of the graph that recorded the Ranger 7 moon flight. A minute/second graph is produced by a device that tests watches. An oscilloscope set at 1/100 of a second graphs tests of a camera shutter. At a setting of 1/1,000,000, the oscilloscope produces a graph of the pulses of an electronic signal generator. Audience: upper elementary, junior high. Purchase \$130 from Prism Products, 220 East 23rd St., New York, N.Y. 10010 (Part of Inquiries in Science Series with Mr. Wizard).

INVISIBLE WALLS. 16mm, b&w. sound, 12 min. Documents the reactions of unsuspecting subjects when their personal space is violated by trained experimenters who are ostensibly conducting a consumer survey. The subjects' varied physical responses, which reveal their feeling of discomfort, are demonstrated and analyzed, and are seen to follow several patterns. The patterns are shown to be learned rather than being innate and culturally derived. The film also shows how children learn these response patterns, and offers some observations on how growing population pressures may affect Americans' sense of personal space. Audience: psychology and anthropology students, general. Purchase \$80 or loan \$6 from University of California Extension Media Center, Berkeley, Calif. 94720.

THEORIES OF BLOOD COAGULATION—T-1698. 16mm, b&w. sound, 28 min. Harold Roberts, M.D., Associate Professor of Pathological Medicine, University of North Carolina, explains the mechanism of blood coagulation, presents history and a brief resume of recent experimental work being done in this field. Some reference is made to the existing pathogenesis of hemorrhagic and thromboembolic disease entities. Audience: medical. Free loan from National Medical Audio-visual Center (Annex), Station K, Atlanta, Ga. 30324.

to the editor

Safe limits

In the Nov. 8 issue of SCIENCE NEWS the present allowable levels of X-ray dosage is assailed. It was stated that "To continue the present guidelines is absolute folly since they were adopted more than 10 years ago—before scientists began studying the effect of radiation on chromosomes."

In Lea's book on "Action of Radiation on Living Cells," published in 1947, there are at least 100 literature references to articles on the effect of X-rays on chromosomes. My own work in this field began in 1936.

Karl Sax
Media, Pa.

Good balance

Barbara Culliton did a very fine job in writing the article, "Defective Virus a Key," (SN: 10/4, p. 308) and reporting factually the comments I delivered at the recent meeting of the American Cancer Society in Hershey, Pa. I believe she drew a good balance between the problems faced with the DNA viruses and the C-type particles that appear to be involved in other types of cancer.

The illustration of the slide of the adenovirus particle that appeared on the front cover was well done. The model was prepared by a number of graduate students and postdoctoral fellows in my laboratory and consists of 252 carefully joined Ping-Pong balls, 12 pipe cleaners, and 12 small round plastic units that are used in flower displays. All were suitably painted and are in scale to the original virus model.

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