

## 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.

**THE EMERGENCY TREATMENT OF HEAD INJURIES—M-1694-X.** 16mm, color, sound, 29 min. Beginning with scenes of an auto accident in which the driver receives a head injury, shows order and details of treatment. Demonstrates steps to assure an adequate airway, to control bleeding, to immobilize neck, head and broken limbs before moving patient and to lessen likelihood of shock. Points out that when all emergency measures have been completed, the patient should be taken to a nearby facility for proper diagnosis and treatment. Discusses various types of head injuries and appropriate treatment. Audience: ambulance rescue teams, physicians, nurses, hospital staffs, medical students. Free loan from National Medical Audiovisual Center (Annex), Station K, Atlanta, Ga. 30324 or purchase information from Milner-Fenwick, Inc., 3800 Liberty Heights Ave., Baltimore, Md. 21215.

**MELTING—POINTS AND POINTERS.** 16mm, b&w, sound, 28 min. A thermocouple is connected to a chart recorder that displays the melting and freezing points of moth flakes. Projecting the crystals through crossed polarizers and applying and removing the heat magnifies the melting and freezing process. The effect of heating and cooling non-crystalline substances is illustrated by forming unusual shapes with candles by a working model of melting and solidifying animal fats and by blowing glass bubbles. Heated soda straw models indicate what happens to crystalline and noncrystalline materials. Audience: upper elementary, junior high. Purchase \$130 from Prism Productions, 220 East 23rd St., New York, N.Y. 10010. (Part of Inquires in Science series with Mr. Wizard).

**NO GREATER CHALLENGE.** 16mm color, sound, 14 min. Shows man's historic and growing hunger for water and a dramatic solution to this challenge—the agro-industrial complex. With the nuclear reactor as the energy source and the desalting plant as the fresh water source tomorrow's coastal deserts may be transformed into self-sustaining, nuclear powered agro-industrial centers consisting of farms and industrial plants. Nuclear power reactors will pump millions of gallons of water from the sea and provide the heat to desalt it. At the same time, low-cost nuclear energy will produce electricity to help extract and process the earth's mineral wealth. Audience: general. Purchase \$47.46 from Byron Motion Pictures, 65 K St. N.E., Washington, D.C. 20002, or free loan information from Audio-Visual Branch, Department of Public Information, Atomic Energy Commission, Washington, D.C. 20545.

**MODERN GEODETIC SURVEY.** 16mm, color, sound, 20 min. Explains the origins and development of geodetic surveying and man's progress in measuring the earth. Audience: general. Free loan from Public Affairs Officers in all Naval Districts.

## to the editor

### A proposal

In our quest to conquer nature rather than take part in it, we seem to think our own technology is better than hers. Perhaps we should look to nature to find a solution to our sewage problems.

According to your editorial, "The Last Refuge of Scoundrels," (SN: 9/27, p. 261), our sewage treatment plants break down sewage into its chemical components and then discharge this water, rich in nitrates, phosphates and presumably a host of other minerals, into our nation's streams and rivers.

Is it necessary that these mineralized waste waters be carried on our national ledgers as a liability? It seems plausible that these same waters might be carried as assets.

Couldn't these waste waters be used for raising some rapidly-growing plant such as bean sprouts in a hydroponics operation? The plants would utilize nitrates and phosphates in their growth thus eliminating some of them before the water was returned to the streams or rivers.

The ideal solution would be to build or convert a factory-like building near the site of a sewage treatment facility into a hydroponics hothouse where plants would be grown in layered trays or racks. The water from the sewage treatment facility would be diverted directly into the hydroponics plants before being disposed of in the rivers. The more plants grown in this water, the more chemicals and minerals removed in feeding the plants. The water would also be aerated as it passed from one tray to the next thus not only reducing the nitrate and phosphate level, but also increasing the oxygen content of the waste water.

This operation could result in two desirable end products. The quality of sewage water would be increased and a marketable product would be pro-

duced in the plants. The plant product could be sold as cattle or hog feed, sold as green manure, or mixed with the sludge from the sewage treatment facility for compost material. The compost could then either be sold or used by the municipality in their own parks and incorporated limits thus saving taxpayers' money which would otherwise be used to buy commercial fertilizers.

What we have been calling filth and throwing away may turn out to be an asset in disguise.

Eric W. Johnson  
Rolla, Mo.

### Wet or dry?

We read with fascination your article on the search and discovery of the quark (SN: 9/13, p. 198) and are anxiously awaiting further verification. But we are waiting even more anxiously for the verification of the even more fundamental particle, the pynke—of which two, of course, make a quark.

R. P. Kidwell, Physicist  
Oren N. Dalton, Physicist  
NR-A, WSMR, N. M.

### World weather kudos

The article on GARP by Kendrick Frazier (SN: 9/6, p. 185) was well done and should provide reliable source material for the nation's press.

This program, I think, is worthy of your continued attention.

Joseph Smagorinsky, Director  
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