to the editor

Gases not so inert

If you advise Mr. Grande of Abington JHS (letter, SN: 6/5/71, p. 380) to consult any good chemistry handbook, such as Chemical Rubber Physics and Chemistry Handbook, he will see that the so-called inert gases combine with themselves, and also some instances have been known where some of these elements have been known to combine with other elements.

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Radiation safety

As a member of the "uninformed public," I would like to comment on Dr. Mary Ann Dugan's letter (SN: 5/15/71, p. 328). I am *not* opposed to the use of nuclear fuel to run power plants. However, I am opposed to power companies being allowed to discharge their waste products without permitting radiation emissions to die down. The half-life of tritium is close to 12 years. Tritium emits beta radiation. The discharge of waste products here in Minnesota by Northern States Power company is in waters used for drinking purposes, swimming and where fishing occurs. Tritiated thymidine may or may not be incorporated into the DNA molecule. However, what of somatic effects of the beta radiation? One cannot assume that the tritium will be diluted properly with regular water molecules. Stream and river currents are not that reliable.

Dr. Dugan does concede the increase of correlation of malignant tumors to ingested ^{3}HTdR. Hence, a somatic radiation problem does exist. NSP in Minnesota has agreed to cool off the water temperature to prevent thermal damage to aquatic life or ecology. However, little is planned to "cool off" radioactive wastes, i.e., hold them until all harmful particulate and electromagnetic radiation cease or are reduced to a "harmless" level. This is the problem associated with nuclear-powered energy plants. Until it is solved, many of us feel that the benefits derived are not in fact cheaper.

Kenneth S. Sachs
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Benefits from space

I am afraid that R. Wayne McAllister has missed the point in his letter "Geography from space" (SN: 5/15/71, p. 328). In the first place, the examples commented upon (TV, Hi-Fi, computers, etc.) were not mine at all. As noted, I had quoted them from an earlier published letter. But more than that, I cannot seriously believe that he actually believes that I am suggesting the Government nationalize these businesses or that the Government contract for such things and give them to welfare recipients. Come now, Mr. McAllister, surely there are other more realistic alternatives. I do not think that it requires a great deal of imagination to understand this.

I was also amused at his inference that I was unaware of (and made no use of) remote sensing data from orbital devices. What he has offered is not a "spillover" benefit at all. These types of data are coming from programs which are doing exactly what they were originally designed to do and are part of the main effort. In fact, his examples are very good specimens of direct allocations which do have a very high degree of potential social value.

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films OF THE WEEK

WONDERING ABOUT THINGS. 16mm, color, sound, 22 min. Carries comments from a number of creative persons in many walks of life. They are asked (and thus the viewer is asked) "Are you concerned about the possible misuse of science?" "Are you satisfied with life as it is today?" The film evokes a series of exercises in creative thinking. Subliminal effects are enhanced through an electronic music score composed for the film. Audience: high school, college, adult. Purchase $240 from Modern Learning Aids, Dept. SN, Box 302, Rochester, N.Y. 14603.

SAFETY PRACTICES IN THE SHOP. Series of eight Super-8mm films, color, silent, each approximately 4 min. Permits students to view films pertaining to the particular tool and equipment they are working with. Titles include: Using Hand Saws, Chisels and Files; Using Screwdrivers, Wrenches and Vises; Using Drill Presses and Grinders; Using Band Saws and Jig Saws; Using Circular Saws; Using Jointers and Routers; Using Band Saws and Jig Saws; Using Cir-Welding Equipment. Audience: high school, community college. Purchase information from Coronet Films, Dept. SN, 65 E. South Water St., Chicago, Ill. 60601.

A PROBLEM OF SHOCK. 16mm, color, sound, 9 min. The first part of the film presents a problem: developing a glass-ceramic that is resistant to thermal shock. It shows that glass, an amorphous material without a highly organized crystal structure, does not conduct heat well, so that the application of heat to one side of a piece of glass will cause stresses that shatter it. The second part, designed to show after class discussion, gives the solution to the problem. It serves as a reward for students who have come close to solving the problem, and as a learning experience for those who have not. Purchase $100 or rental $8.50 from Extension Media Center, Dept. SN, University of California, Berkeley, Calif. 94720.

GANDHI'S INDIA. 16mm, b&w, sound, 58 min. The life of Mohandas Gandhi (1869-1948) and his influence on present-day India are examined. Gandhi, the prophet of non-violence, believed in the goodness and equality of all men. Civil disobedience, not violence, was his strategy to accomplish peaceful change and eliminate the gap between classes in society. Before struggling against the British Government in India, Gandhi studied law in London and then went to South Africa, where he was jailed in 1908. Footage of Gandhi, and interviews with his associates, followers, and others are included. Audience: high school, college, adult. Lease and rental information from Audio-Visual Center, Dept. SN, Indiana University, Bloomington, Ind. 47401.

ENVIRONMENT. 16mm, color sound, 28½ min. The degrading of our environment is a major problem. However, the causes of this deterioration are complex, and are closely bound to the strengths of a modern industrial society: affluence, advanced technology and individualization. This film shows that while such practices as high-technology farming can be destructive to the land, the products of this farming are vitally needed. What balance must be struck? Can we preserve our environment and still hold on to our technology and life style? After posing these questions, the film is left open-ended. Audience: high school, college, adult. Purchase $370 or rental $25 from BFA Educational Media, Dept. SN, 2211 Michigan Ave., Santa Monica, Calif. 90404.

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.