Letters

Academic Freedom

"An academic position is unique." How many times have we heard this declaration? I am sure that it was used by many during the halcyon days of the 1960's to recruit top talent to academia. Presently, when universities are even more under public scrutiny, when every day more faculties find it necessary to unionize, when the tenure system is being examined, reexamined, and examined again, the uniqueness of tenure alone would make the campus a very special place. However, Dael Wolfle (Editorial, 18 May, p. 699) and others have made the interpretation of tenure in terms of academic freedom much too restrictive. I refer specifically to Wolfle's approval of awarding tenure "only to those whose academic freedom is important to society. . . ." We can all appreciate the need for complete freedom for those who would speak out against the actions of government, but what about those faculty who must speak out against the university as represented by its administration? Surely those of us who would speak out in attempting to improve our institutions should be accorded the same, if not more, protection than those who would criticize government as an institution. This form of academic freedom is far more at issue today (although not necessarily more important) than the usual protection afforded us by the Constitution.

GEORGE DAHLGREN
Department of Chemistry,
University of Cincinnati,
Cincinnati, Ohio 45221

Future Food Supply

Lester R. Brown's editorial "Rising food prices: Who's responsible?" (27 Apr., p. 373) is timely, and his points concerning the need for new technology for the regulation of birth rates of cattle and the regulation of soybean yields are especially significant in view of the Nixon budget for research funds. What could be of higher priority and more relevant in today's society than research funds for problems associated with the future food supply? Hopefully, rationality will reign in the halls of Congress, and funds for research on these and other vital problems will receive special attention.

FRANK H. BAKER
Animal Science Department,
University of Nebraska,
Lincoln 68503

Increase in the cost of fossil fuel may account for most of the increase in the price of food. Approximate analysis of the energy requirements of agriculture (fuel to make tractors; fuel to operate tractors; fuel to make fertilizer, herbicides, and insecticides and deliver them to the farm; and fuel for the harvesting process) indicate that 5 calories of fossil fuel are consumed for every calorie of food delivered to the farm gate (*1*). American farming is essentially a process for converting fossil fuel to food.

Furthermore, there is a close correlation between the gross national product and the fossil-fuel consumption of a nation (*2*). This leads to the conclusion that there is also close correlation between the economic returns to labor and the rate of fossil-fuel consumption by labor. Thus there is likely to be a direct relation between the cost of producing food and the price of fuel.

Agriculturists have congratulated themselves on the superior productivity of American farms. As the supply of fossil fuels becomes limited, we may wish we had preserved some of the more primitive techniques of "underdeveloped nations."

The increased productivity of America's forests has come primarily through imitation of agricultural practice—site preparation (cultivation), planting, and fertilization. All of these practices require fossil fuel. A forest is supposedly a renewable resource. One wonders if it is wise for foresters to imitate farmers.

THOMAS O. PERRY
Department of Forestry,
North Carolina State University,
Raleigh 27607

References

1. M. J. Perleman, *Environment* **14** (No. 8), 8 (1972).
2. A. B. Makhijani and A. J. Lichtenberg, *ibid.* (No. 5), p. 10.

Standards for Carcinogens

With respect to the apparent lack of precautions taken by some manufacturers in the shipping and labeling of *N*-nitrosamines, which are potent carcinogens (Letters, 26 Jan., p. 329; 11 May, p. 542), it has been our experience that many production workers in dye plants, the petrochemical industry, and fine chemical manufacture handle volatile carcinogens in the open, with little or no protective clothing or ventilation. Our concern has been so great that the Oil, Chemical and Atomic Workers International Union has joined with the Health Research Group, a Ralph Nader affiliate, in petitioning the Department of Labor for the establishment of zero exposure standards for 14 of these and other carcinogens:

2-Acetylaminofluorene
4-Aminodiphenyl
Benzidine and its salts
3,3′-Dichlorobenzidine and its salts
4-Dimethylaminoazobenzene
α-Naphthylamine
β-Naphthylamine
4-Nitrobiphenyl
N-Nitrosodimethylamine
β-Propiolactone
Bis(chloromethyl)ether
Methyl chloromethyl ether
4,4′-Methylenebis[2-chloraniline]
Ethyleneimine

The response of the Department of Labor to this petition has been to issue emergency standards. Unlike the controls established under the Occupational Safety and Health Act, the standards proposed for these toxic chemicals do not include exposure limits. Only work practices such as the decontamination of clothes and the prohibition of drinking fountains in "controlled" areas are specified.

The Department of Labor has called these chemicals "toxic and physically harmful." They will continue to present danger to both scientific and blue-collar workers, not only during shipment but also during their manufacture and industrial use, until stringent controls are set.

JEANNE M. STELLMAN
Oil, Chemical and Atomic Workers International Union,
P.O. Box 2812,
Denver, Colorado 80201