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## Frustrations of Eastern Science

As head of a university department for several years in East Germany, I read with interest Jordan's article, "Coordinated planning in science in Communist Europe" (17 Feb., p. 796). Although scientific work is respected and encouraged in the Eastern countries, I found it seriously handicapped by generally poor living conditions, lack of freedom, restriction of traveling, lack of equipment and Western publications, and interference by party and state.

The authorities are ignorant of the requirements of research. They think that all problems can be solved by "planning" and by "collective" work. The latter concept involves endless formal discussions. "Planning" involves prognosticating minute details; that is, the smallest amounts of chemicals required in the future. The thought processes of the scientist should be based on "dialectic materialism." All members of the department—including the charwoman—should participate in forming the plan. Then the plans are permanently changed, approved, or disapproved by anonymous boards, and very often directed toward impossible aims, such as making the country independent of Western imports. Nevertheless, the scientist works as an individual, though under much more difficult conditions than in the West.

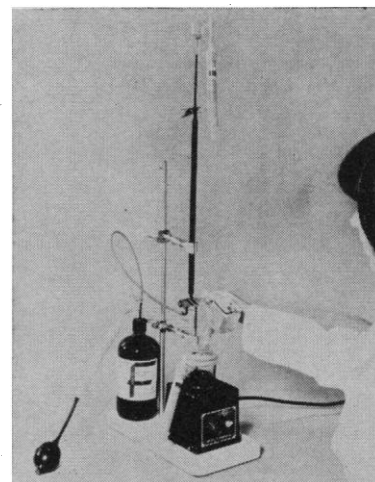
On international levels, generalized programs exist, but the individual scientist knows very little about them. Furthermore, especially recently, the centrifugal forces of the Eastern camp are felt: planning on an international level becomes more and more difficult. Each state looks after its own interests and the resolutions are rarely implemented. Indeed, contacts exist mainly on the government level. It is difficult for the scientist to travel, and, for all practical purposes, contacts are based on personal relationships. Yet these personal relationships are much rarer than in the West. Each journey requires the sanction of the government, which is difficult to obtain. I traveled once to Moscow after waiting 7 months for my visa which restricted me to the area of that city. I was invited to visit Moscow State University but, when I attempted to visit departments of the Academy of Sciences, I was not permitted to contact the scientists directly. Such contacts were made through the authorities who asked me, "You work for a university—why do you wish to



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visit departments of the Academy?" In spite of state and international planning, there is, in practice, much less scientific cooperation between the socialist states than between the capitalist ones.

K. DEUTSCH

*Department of Biological Sciences,  
University of Aston,  
Birmingham, England*

### Prior Preparation Pays

I should like to suggest the following addendum to Bragg's recommendations ("The art of talking about science," 30 Dec., p. 1613) for improving the quality and efficiency of seminars. At the bottom of the usual seminar announcement there should be listed one or two references to recent journal articles relevant to the seminar topic. This opportunity to brush up on an old, or be introduced to a new, area of research would greatly assist students who often lose the train of thought at seminars because they are unfamiliar with terms or ideas which the speaker assumes everyone knows and understands. I am sure that this small modification of standard practice would greatly increase the efficiency of seminars and attention of participants.

ALBERT' TONCHEE

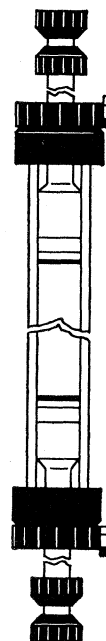
*University of California at San Diego,  
Post Office Box 109, La Jolla 92037*

### Canada's Science Council: Incomplete Representation

Most Canadian scientists will greatly appreciate Carter's article ("Canada: science advisors to propose priorities," 2 Sept., p. 1083) in which the organization and responsibilities of the Science Council and Scientific Secretariat of Canada were outlined. However, there is a considerable gap in the representation of the Council; in spite of the fact that the province of Alberta is one of the leading provinces in Canada and that it has two active universities and an internationally recognized Research Council, it has not a single representative on the Science Council. As Carter pointed out, the representation from Quebec is considerable: seven council members. Apart from demographic implications, this emphasizes the peculiar political overtones which the organization and functions of the Council may

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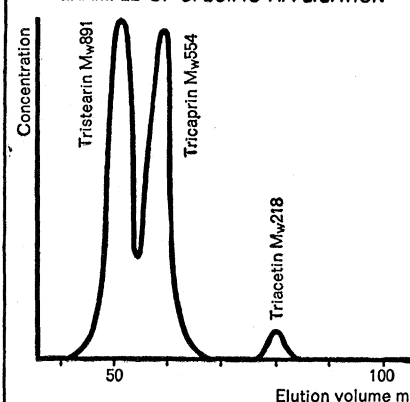
### RANGE OF APPLICATION

Solvent	Approx. solvent regain ml solvent/g dry gel	Approx. bed volume ml/g dry gel
Dimethylformamide	2.2	4
Water	2.1	4
Methanol	1.9	3.5-4.0
Ethanol	1.8	3.0-3.5
Chloroform*	1.8	3.0-3.5
n-butanol	1.6	3
Dioxane	1.4	2.5-3.0
Tetrahydrofuran	1.4	2.5-3.0
Acetone	0.8	1.5

\*Containing 1% ethanol.

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### EXAMPLE OF SPECIFIC APPLICATION



Separation of glycerol esters in chloroform. Bed dimensions: 2.5x32 cm. Sample: 2 ml containing 4 mg of each substance. Flow rate: 0.6 ml/min.

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