

## ORION'S NEW ION/pH METER

measures  
nitrate, calcium,  
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total water hardness,  
pH and redox potentials

The Model 401 is the first instrument designed especially for *direct* readout of specific ion electrodes — or read to 0.02 pH or 0.2 mv.

The 401 is a precision laboratory instrument that's completely portable. Battery life is 1000 hours — cost is only 0.2¢ an hour.

Always ready to go at a flick of the selector switch: zero drift chopper amplifier circuitry eliminates instrument drift. Operates from  $-10^{\circ}$  to  $+165^{\circ}\text{F}$ .

The meter comes complete with carrying case from your laboratory supply dealer for \$330. Also in stock, the most complete line of chemical sensing electrodes available today.

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Send bulletin on 401 and following  
electrodes \_\_\_\_\_

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

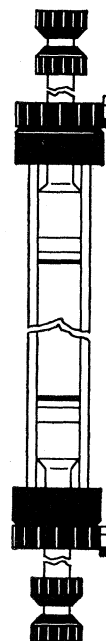
*University of California at San Diego,  
Post Office Box 109, La Jolla 92037*

### 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

NEW from PHARMACIA

## SEPHADEX® LH-20 extends gel filtration to organic solvents



Pharmacia Fine Chemicals now introduces the *first* lipophilic derivative—Sephadex LH-20—to extend the use of Sephadex to organic solvents. Since it swells in water, polar organic solvents and in mixtures of these solvents, Sephadex LH-20 makes it possible to apply the conventional Sephadex gel filtration technique in fields such as lipid chemistry, polymer chemistry and other areas of organic chemistry and biochemistry where organic solvents must be used.

### Sephadex Solvent-Resistant Columns

The only laboratory columns especially designed for use in chromatographic separations with organic solvent systems. The columns are equipped with two specially designed adjustable flow adaptors for use with various bed heights and for ease of sample application. The columns have the advantage of allowing either descending, upward flow or recycling chromatography as one of their many features.

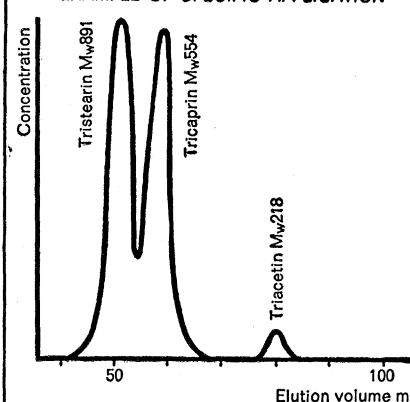
### RANGE OF APPLICATION

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.

Particle size: 25-100  $\mu$

### 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.

For additional technical information, including the booklets *Sephadex LH-20* and *The Sephadex Solvent-Resistant Columns*, write to:



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