The experiment illustrated in Figure 3 shows that an isolated ventral spinal funiculus displays stable physiological properties for 50 min in the gas phase of the nerve chamber (isolation of the funiculus as described by RUDIN and EISENMAN[2]).

Zusammenfassung. Es wird eine thermostatisierte Nervenkammer mit vorgeschalteter Einrichtung zur Befeuchtung und Erwärmung der Gase beschrieben. Drainage kurzschliessender Flüssigkeit von den Geweben ist ohne Einfluss auf das Gleichgewicht in der Nervenkammer. Isolierte Rückenmarksfunikel zeigen in der Gasphase während 50 min konstante elektrophysiologische Eigenschaften.

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TERMINOLOGIA

The Nomenclature of Multiple Enzyme Forms

Since the original demonstration that some enzymes may exist in a number of different forms in the same species or the same tissue, a considerable literature has accumulated on the topic. There has been no unanimity in these papers on the method of identifying a particular form, as WIEME[1] has pointed out. In a later note, KING and THOMPSON[2] stated that the specific question of the numbering of isoenzymes which have been separated by electrophoresis had been referred to the Standing Committee on Enzymes and the International Commission of Editors of Biochemical Journals. The Enzyme Commission in its Report[3] made no recommendation about multiple enzyme forms; and the International Union of Biochemistry, when it dissolved the Enzyme Commission and set up the Standing Committee on Enzymes[4], also set up a Sub-committee on Isoenzymes composed of the late E. J. KING, C. L. MARKERT, R. J. WIEME, F. WROBLEWSKI, and E. C. WEBB. After the death of E. J. KING, N. O. KAPLAN was appointed to the Sub-committee by the Bureau of I.U.B. This Sub-committee reached certain decisions which have been approved by the Standing Committee on Enzymes and are set out below.

Multiple enzyme forms may be distinguished from one another by any of several means, e.g. electrophoresis, chromatography, salt fractionation, ultracentrifugation, immunochemistry and reaction kinetics. The electrophoretic method has been most commonly employed, particularly in clinical laboratories, and numbering systems which have been employed have usually related to electrophoretic separation. Unfortunately, two quite different systems have been used. It is now recommended that:

'When multiple forms of an enzyme are identified by electrophoretic separation, they should be given consecutive numbers, the form having the highest mobility towards the anode being numbered one.'

This system is in conformity with that universally used for the fractions obtained by electrophoresis of serum proteins.

Such numbering systems are probably to be regarded as temporary expedients until information is available about the chemical differences between the various forms. If the molecules of the different forms vary in the nature and arrangement of protein sub-units, a nomenclature should be used analogous to that which has been successfully used in the field of haemoglobin chemistry.

The Sub-committee also considered the question of a suitable word to be used to describe multiple enzyme forms. MARKERT and MØLLER[5] originally proposed 'the term *isozyme* to describe the different molecular forms in which proteins may exist with the same enzymatic specificity'. Since then the forms *iso-enzyme* or *isoenzyme* have also been widely used, and the term has been limited to multiple forms in a single species. The majority of the Sub-committee felt that the latter forms were preferable as being more logical and in line with such terms as *isotope*.

It is therefore recommended that:

'Multiple enzyme forms in a single species should be known as *isoenzymes*, although since either form is readily intelligible this recommendation is not to be interpreted as excluding the use of "isozyme" if any individual author prefers it.'

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Department of Biochemistry, University of Queensland, Brisbane (Australia), April 16, 1964.

[1] R. J. WIEME, Lancet *1962 i*, 270.
[2] E. J. KING and R. H. S. THOMPSON, Lancet *1962 i*, 589.
[3] Report of the Commission on Enzymes of the International Union of Biochemistry (Pergamon Press, Oxford 1961).
[4] R. H. S. THOMPSON, Nature (Lond.) *193*, 1227 (1962).
[5] C. L. MARKERT and F. MØLLER, Proc. nat. Acad. Sci., U.S. *45*, 753 (1959).

CORRIGENDUM

J. BOURDILLON: *Flow of a Solution into a Tube Filled with Solvent: Static Concentration and Flow Concentration of the Solute.* Exper. vol. XX, fasc. 8, p. 423 (1964). An error occurs in the very first line on page 424. It should read as follows:

'For $U - S \geqq 0.5$, we have:'.