Different proportions of the present solvent system and other solvent systems were investigated and no appreciable improvements noted.

The purification of oestrogens contained in urinary extracts has also been attempted and is still being studied.

This work was carried out under a grant from the Consiglio Nazionale delle Ricerche (Rome).

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Received February 27th, 1964

J. Chromatog., 15 (1964) 428–429

A method for automatic packing of Sephadex columns

Various methods have been investigated and used for packing Sephadex columns. One, described by FLODIN[1], gave good results with Sephadex G-25 and G-50. Another packing method, useful for all Sephadex types, was later developed by the same author[2]. In this latter method, the extension tube with the Sephadex suspension, connected to the column to be packed, has to be emptied of the supernatant as soon as it is depleted of gel and refilled with new suspension. This must be repeated until the desired bed length has been obtained. The packing of large columns with this method would be very time consuming. Furthermore, after several fractionations, the flow in such large columns may cease altogether so that frequently repacking is necessary.

In this note an automatic packing method is described which does not require continuous service during the packing process. This method can also be used for column materials other than Sephadex, although it is especially suitable for this material.

Method

A schematic diagram of the packing setup is shown in Fig. 1. The column is carefully mounted vertically and the outlet is closed. It is filled with the desired liquid and a small amount of Sephadex suspension is added. When a layer of 2–5 cm has formed[2] the system is closed, as shown in Fig. 1, and the outlet is opened. From the flask with the Sephadex suspension under stirring, the gel grains are entrained by the liquid which is siphoned through the PVC tubing into the column.

The packing rate depends upon the siphoning head between the level of the Sephadex suspension in the flask and the bottom of the column and also upon the

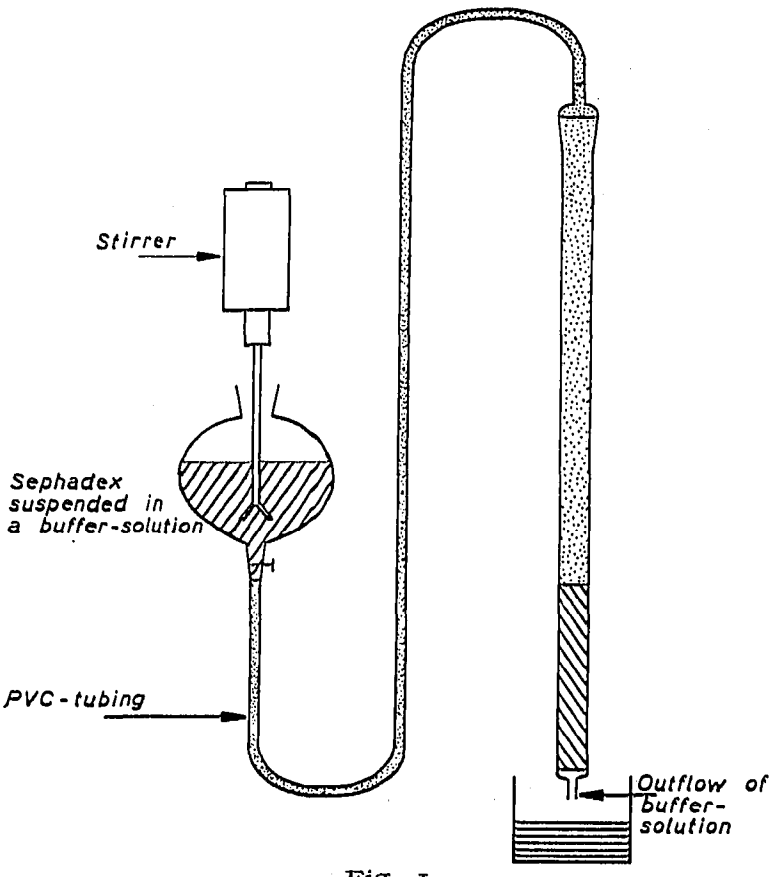

Fig. 1.

speed of the stirrer and the concentration and the type of Sephadex. Good packing can be obtained with a Sephadex concentration in the flask of about 2 %. The compactness of the Sephadex column formed is controlled by the siphoning head. By connecting a T-tube to the flask, two columns can be packed at the same time under identical conditions.

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Received February 11th, 1964