

from this figure that the quality of separation is much better than that obtained with modifications of centrifugal chromatography where the separation is based on adsorption.

Acknowledgement

The authors wish to express their deep gratitude to Dr. MACEK, Research Institute of Pharmacy and Biochemistry, Prague, for the interest he has shown in this work.

Central Research Institute of Food Industry,
Prague (Czechoslovakia)*

JAN ROSMUS
ZDENĚK DEYL

¹ L. HORNER AND W. KIRMSE, *Ann.*, 597 (1955) 48.

² I. GASPARIČ AND M. VEČEŘA, *Collection Czechoslov. Chem. Commun.*, 22 (1957) 1426.

³ M. PAVLÍČEK AND Z. DEYL, *Czechoslov. Patent* 96,385 (1959).

⁴ M. MOTTIER AND M. POTTERAT, *Anal. Chim. Acta*, 13 (1955) 46.

Received April 6th, 1961

* Director: FRANTIŠEK VONEŠ.

J. Chromatog., 6 (1961) 187-190

BOOK REVIEWS

Chromatographic and Electrophoretic Techniques, edited by IVOR SMITH, William Heinemann Medical Books Ltd., London, 1960; Vol. 1: *Chromatography*, xv + 617 pages, price 65 s; Vol. 2: *Zone Electrophoresis*, viii + 215 pages, price 30 s.

The editor of these two volumes has tried to prepare a practical handbook for chromatographic and electrophoretic methods that contains sufficient details for work without consultation of the literature to be possible. He was aided in this task by 22 authors for chromatography and 8 authors for electrophoresis.

We agree entirely with the editor that it would be highly desirable to have a volume that presents chromatographic methods in the form of cook-book recipes, so that a technician or collaborator may be told to look up a certain method and apply it directly to, for example, amino acids in body fluids. What is questionable at the moment is whether work on chromatography is sufficiently advanced as yet to permit the suggestion, for example of one single apparatus or whether detailed methods can be given for fields where new problems keep coming up every day.

It may be said, however, that the two books succeed to the extent of about 90% in providing good and detailed techniques. It is regrettable however that there are several techniques and whole chapters that look rather perplexing to the reviewer. We shall pick out a few: on page 18 (Vol. 1) it is suggested that samples should be placed on the paper with a platinum loop, and the platinum wire flamed for cleaning. No limitations of this technique are mentioned and the reviewer hates to think

J. Chromatog., 6 (1961) 190-191

what would happen if this technique were applied indiscriminately by a beginner in inorganic or radiochemistry, for example for placing ^{103}Pd onto a paper and then using the wire for some other radioactivity. It is of course common sense not to do such things, but then most techniques of paper chromatography are common sense, so why give details at all unless they are absolutely foolproof. Then there are some rather puzzling chapters, for example that on circular chromatography and that on ion-exchange papers. Circular chromatography is as usual described as space saving (is there really such a housing shortage?) but leaves the beginner in doubt as to whether after reading this chapter or that on ion-exchange papers he should not forget all about the usual sheet chromatography and from now on work only with the technique advertised.

In the volume on electrophoresis we welcome very much the fact that only a relatively small part is devoted to the separation of serum proteins on paper strips and much space devoted to haemoglobins, cellulose acetate electrophoresis and starch (gel, block, etc.) electrophoresis. There is also a short but adequate chapter on high voltage electrophoresis and another short but less adequate chapter on continuous electrophoresis. The mention of some of the commercial types of continuous apparatus would seem essential.

In spite of these few shortcomings these books can be strongly recommended to anyone intending to use chromatographic and electrophoretic techniques in clinical and biochemical problems.

MICHAEL LEDERER (Rome)

J. Chromatog., 6 (1961) 190-191

Estudio de la Proteinas del Suero Humano por Medio de la Electroforesis en Papel,
by JUAN A. MORALES MALVA, Editorial Universitaria, Santiago de Chile, 1958,
xix + 169 pages.

After many years of research in the field of haematology Prof. JUAN A. MORALES MALVA has written a book on the study of proteins by electrophoresis. This small volume is neither a treatise nor a guide to electrophoresis, but a personal and critical contribution dealing with his work on the use of this technique in the diagnosis of diseases. Methods are only considered as a means to diagnostic work.

The first part of the book (pages 1-52) deals with an examination of the properties of serum proteins, particularly those in abnormal and pathological sera. The second part, which is divided into two sections, describes the techniques of electrophoretic separation and quantitative determination, and a series of previously unpublished experiments by the author.

G. B. MARINI-BETTÒLO (Rome)

J. Chromatog., 6 (1961) 191