

**Traité de Biochimie Générale.** Volume I. *Composition Chimique des Organismes (In Two Parts).* By M. JAVILLIER, M. POLONOVSKI, M. FLORKIN, P. BOULANGER, M. LEMOIGNE, J. ROCHE and R. WURMSER. Masson & Cie., 120, Boulevard Saint-Germain, Paris VI, France. 1959. 1475 pp., 17.5 × 25.5 cm. Price, Brochés, 22.000 fr.; Cartonnés toile, 24.500 fr.

This is the first of three volumes on general biochemistry planned by the authors and their collaborators. The second will deal with enzymology and the third with metabolism. They address themselves primarily to University students in pure and applied chemistry and biology. The first volume is concerned exclusively, and rigorously so, with the static aspect of biochemistry and follows the general pattern of such text books, beginning with the elementary composition of natural products and going on to the chemistry of carbohydrates, lipids and proteins. Details of isolation and identification methods as well as of organic syntheses support this descriptive and very comprehensive inventory. One will find compiled in the numerous tables much information not easily obtainable elsewhere. As in all coöperative efforts of this type, it is not easy to strike a perfect balance between sections. In the present instance the accent is on protein chemistry. Of particular interest in this reviewer's opinion are the chapters on the isolation and preparation of a wide variety of proteins and the one on chromoproteins. A final chapter on associations between proteins, lipids and carbohydrates and on biochemical morphology constitutes a happy closing note.

This text book is richly documented, a rough check showing nearly four thousand references. These are placed at the end of each chapter and are subdivided into review articles and original papers some as recent as 1956. A general author index and a subject index are to be found at the back of the second part.

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**Gas Chromatography.** Proceedings of the Second Symposium Organized by the Gas Chromatography Discussion Group under the Auspices of the Hydrocarbon Research Group of the Institute of Petroleum and the Koninklijke Nederlandse Chemische Vereniging held at the Royal Tropical Institute, Amsterdam, May 19-23, 1958. Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1958. xiii + 383 pp. 16 × 25 cm. Price, \$13.00.

This Second Symposium on Gas Chromatography contains twenty-eight contributed papers divided into three general headings: "Theory of Gas Chromatography," 10 papers, "Techniques and Apparatus," 9 papers and "Applications," 9 papers, along with a report of the discussions. Each main theme is prefaced by an introductory lecture and a general survey of the program is given in a final review lecture. The more formal opening and closing addresses are included as well.

This volume, as was the report on the First Symposium, will doubtless prove to be a useful mine of information, both to the newcomer to the field, as well as to the more experienced practitioners of the art. Obviously, a selection of the subject matter of individual papers merely reflects the interests of the reviewer, but passing mention must be made of some topics. The theoretical basis of gas chromatography is considered both in respect to the significance of parameters of the van Deemter equation for packed columns and in regard to chromatography in coated capillaries. Application of theory to specific problems, such as that of the chromatography of highly radioactive gases and of the determination of thermodynamic quantities, are discussed. The section on Techniques and Apparatus contains a wealth of practical information regarding detectors, on columns of high efficiency and on the programmed column temperature technique. Automatic devices are discussed in application

to preparative scale chromatography and to plant stream analyses. A few applications of a more specific nature are included. A Nomenclature Committee was convened again at this Symposium and its recommendations are included in this volume.

In comparison with many of the papers read at the First Symposium, the present papers are a reflection of the advances made in the intervening two years. Most of the Second Symposium Papers present techniques that are more sensitive, more reproducible or more accurate or deal with the theory with a more critical view.

In conclusion, it can be reported that a useful addition has been included in the work, namely, an author index to the discussion contributions. While it is recognized that considerable effort and time would be involved and that the latter might lead to a tarnishing of the record for rapidity of publication which these Proceedings now enjoy, it is felt that in future Proceedings some consideration might be given to a subject index.

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**Premier Colloque International de Photographie Corpusculaire.** Strasbourg, 1<sup>er</sup> au 6 Juillet, 1957. Centre National de la Recherche Scientifique, 13, Quai Anatole-France, Paris 7, France. 1958. 451 pp. 16.5 × 24.5 cm. Price 5.300 fr.

This volume represents the proceedings of the first international conference on "nuclear" emulsions. It is presented entirely in French, those contributions not originally such were translated. The subject matter principally covered in this conference was that relating to the intrinsic properties of nuclear emulsions rather than with the techniques relevant to their exploitation in experiment. This degree of emphasis is perhaps to be regretted somewhat but one would hope then that at some subsequent Conference the latter subject would receive the attention it deserves. This is not meant to minimize the importance and usefulness of the Conference. It is indeed a most valuable contribution and an exceedingly useful compilation of the most modern viewpoints on photographic theory and the techniques related to the "handling" of nuclear emulsion.

It is, of course, impossible to cover in a review the proceedings of such a Conference. The reviewer can only record what appear to him as the highlights. The first paper was an excellent review by Prof. J. W. Mitchell of "Photographic Sensitivity." This was followed by a series of contributions on more particular aspects of the above general problem. Perhaps one of the highlights of the Conference was the first (to my knowledge) detailed presentation of the Russian work in this field.

A next group of papers was primarily concerned with the problem of the development of nuclear emulsion. This series of papers is certainly of use to the worker utilizing emulsions in experimental work as it covers the entire spectrum of "problems" arising in this somewhat "magic" field. These contributions are detailed and explicit and well documented with illustrations. This series of papers was followed by a group of brief presentations relevant to the experimental utilization of emulsions as detectors of nuclear particles in various branches of physics. It is this particular aspect the reviewer feels was not emphasized sufficiently.

All in all the volume would appear to be a useful presentation of a large and important body of technical knowledge in a somewhat highly specialized field. Each contribution contains a bibliography and the pursuant discussion is presented in its entirety. The volume is handsomely bound and well printed.

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