

1961, VOLUME 78, No. 2

THE BIOCHEMICAL JOURNAL

EDITED FOR
THE BIOCHEMICAL SOCIETY

Editorial Board

| | |
|----------------------------|---|
| THORPE (<i>Chairman</i>) | H. J. ROGERS (<i>Deputy Chairman</i>) |
| W. N. ALDRIDGE | D. C. HARRISON |
| J. S. D. BACON | E. F. HARTREE |
| W. BARTLEY | J. LASCELLES |
| K. BURTON | J. MANDELSTAM |
| E. A. DAWES | W. S. PEART |
| R. M. C. DAWSON | P. J. RANDLE |
| J. J. SCOTT | |

Secretary to the Board: F. CLARK

CAMBRIDGE UNIVERSITY PRESS

LONDON AND NEW YORK

Price 35s. net (U.S.A. \$6.00)

INDEX
MEDICUS

THE BIOCHEMICAL JOURNAL

NOTES FOR CONTRIBUTORS

Papers submitted for publication in *The Biochemical Journal* should be written concisely. The sections below concerning the preparation of the typescript give only general indications. Authors are urged to consult the more detailed *Suggestions to Authors, Chemical Nomenclature and Abbreviations, Symbols, Usages and Conventions*, which was published in May 1957 (*Biochem. J.* 1957, 66, 1); also *Notes on Preparation of Illustrations*, which was published in January 1956 (*Biochem. J.* 1956, 62). Copies of these two pamphlets may be obtained from the Editorial Office, The Biochemical Journal, 133-135 Oxford Street, London, W. 1, price 1s. 6d. (*Suggestions to Authors*) and 1s. (*Notes on Preparation of Illustrations*) post free.

Strict observance of the requirements of *The Biochemical Journal* will shorten the period between the receipt of a paper and its publication.

Communications. Papers submitted for publication should be sent to the Secretary to the Editorial Board, The Biochemical Journal, 133-135 Oxford Street, London, W. 1.

Abstracts. Authors should submit with their typescript an abstract suitable for inclusion in *International Abstracts of Biological Sciences*. This abstract will not appear in *The Biochemical Journal* but will be edited before being passed for publication in the Abstracts.

The abstract should outline as briefly as possible the results and definitive conclusions of the work submitted. Details of methods are generally not required. A paper of average length should be abstracted in about 100 words. The abstract should be typed in double spacing on a separate quarto sheet in the following form: title; name(s) of author(s); *Biochem. J.* (space for year, volume and page reference); address (for reprint applications); abstract. For example:

The metabolism of short-chain fatty acids in the sheep. 4. The pathway of propionate metabolism in rumen epithelial tissue. R. J. Pennington and T. M. Sutherland. *Biochem. J.* 1956, 63 618-628 (Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland)—(Abstract).

Reprints. Where at least one author of a paper is a member of The Biochemical Society, twenty-five reprints are supplied free of cost. Any author may purchase additional reprints if he notifies the Press on the appropriate form immediately the proof of the paper is received. Communications about the purchase of reprints should be addressed to the University Press, Cambridge.

General. It is the policy of *The Biochemical Journal* to publish papers in all fields of biochemistry—plant, animal and microbiological—provided that they describe results which make a new and fundamental contribution to biochemical knowledge, or that they describe methods applicable to biochemical problems. Submission of a paper to the Editorial Board will be held to imply that it reports unpublished work, that it is not under consideration for publication elsewhere, and that if accepted for *The Biochemical Journal* it will not be published elsewhere in the same form, either in English or in any other language, without the consent of the Editorial Board.

Contributors who reside abroad may nominate somebody in Great Britain who is willing to correct the proofs of their papers. Proofs are also sent to all authors residing abroad, if necessary by airmail, whether or not they have nominated a proof reader

in Great Britain; if these are returned immediately, it will normally be possible to incorporate corrections in the final proof. The method of correcting proofs given in B.S. 1219 or B.S. 1219C (obtainable from the British Standards Institution) is preferred.

Papers should be headed by an informative title, by the names of the authors and by the name and address of the Laboratory where the work was performed. Female authors should use one given name and the surname, and male authors should use initials and surname only. Descriptive material about the author, e.g. Beit Memorial Fellow, or details of financial support, should appear as a footnote on the first page or, preferably, in the acknowledgements at the end of the paper.

Typescripts should bear the name and address of the person to whom the proof of the paper is to be sent, and should give also a shortened version of the title, not exceeding forty-five letters and spaces in length, suitable for a running title in the published pages of the work.

If a paper that has been returned to an author for revision is not resubmitted within six months, it will be deemed to be a new paper and the date of receipt altered accordingly. A revised paper containing a significant amount of new material will also be redated.

A paper should be written only when a piece of work is rounded off. Preliminary or abortive experiments should not be described.

It would help the editors if the author, when submitting a paper which is part of a series, would enclose reprints of the immediately preceding parts.

Forms of papers submitted for publication. Papers should be in double-spaced typing on sheets of uniform size with wide margins. Top copies only should be submitted. The paper should be written in English.

The onus of preparing a paper in a form suitable for sending to press lies in the first place with the author, who should first consult the detailed *Suggestions to Authors, Chemical Nomenclature and Abbreviations, Symbols, Usages and Conventions*. Authors should also refer to a current issue of the *Journal* in order to make themselves familiar with the typographical conventions, use of cross-headings, lay-out of tables, citation of references, etc. The need for editorial revision of a badly prepared typescript will lead to delay in publication. Papers on specialized subjects should be presented so that they are intelligible to the ordinary reader of the *Journal*. Sufficient information should be included to permit repetition of the experimental work.

Generally, papers should be divided clearly into sections, as follows: (a) introduction, containing the reasons for doing the work; (b) Experimental methods: with chemical papers the experimental part may appear towards the end, but otherwise should follow the introduction; (c) Results: these should be given concisely; the use of both tables and figures to illustrate the same results will only rarely be permitted; only illustrative protocols should be included; (d) Discussion: it is desirable that the presentation of the results should be separated from the discussion of their significance; this section should be strictly limited to discussion, and should not recapitulate results; (e) a Summary, about 3% of the length of the paper: the paragraphs of the Summary should be numbered; (f) acknowledgements; (g) References. The arrangement suggested for sections (b)–(d) is not binding on authors; other ways of arrangement are sometimes more suitable.

The Biochemical Journal uses as a standard for spelling the *Concise Oxford Dictionary of Current English* (Oxford: Clarendon Press).

Illustrations. Diagrams that do not conform with the directions given in *Notes on Preparation of Illustrations* may have to be redrawn by the Press and the expense charged to the author. Legends and captions should be written so that the general meaning of each illustration can be understood without reference to the text, and so that the exact experimental conditions used to obtain the results illustrated are made clear. Illustrations requiring reproduction as half-tone plates should be avoided whenever possible. Photographs or drawings of paper chromatograms, particularly one-dimensional, are not generally published.

Tables. Tables should have headings which make their general meaning comprehensible without reference to the text. Conditions specific to the particular experiment should be stated. Reference to the text for general experimental methods is permissible provided that there is no ambiguity. The units in which the results are expressed, e.g. g./100 ml., should be given at the top of each column, and not repeated on each line of the table.

Tables should be typed on separate sheets and their approximate position in the text indicated. Words or numerals should be repeated on successive lines: 'ditto' or ',,' are not to be used.

Footnotes. These should be avoided in the text as far as possible.

FORTHCOMING PAPERS

It is hoped to publish the following papers in the next issue of *The Biochemical Journal*:

Thiosulphate oxidation and cytochromes in *Thiobacillus X*:

1. Fractionation of bacterial extracts and properties of cytochromes. By P. A. TRUDINGER
2. Thiosulphate-oxidizing enzyme. By P. A. TRUDINGER

A method of separating neutral amino acids from neutral oligopeptides. By P. R. CARNEGIE

Filter-paper ionophoresis of cupric complexes of neutral amino acids and oligopeptides. By P. R. CARNEGIE and R. L. M. SYNGE

Addendum—Acylation with esters of *p*-nitrophenol. By D. W. RUSSELL

Bound amino acids of ryegrass: the isolation of amphoteric peptide-like substances of low molecular weight. By P. R. CARNEGIE

Metabolic incorporation of L-[¹⁴C]valine into protein and bound non-protein forms in Italian ryegrass. By R. L. M. SYNGE and MARY A. YOUNGSON

Fractionation of the β -glucosidases from *Aspergillus niger*. By C. R. KRISHNA MURTI and B. A. STONE

The determination of haptoglobins in normal human serum. By H. SMITH and J. A. OWEN

The glycolytic enzymes of guinea-pig lung in experimental bagassosis. By V. N. SINGH, T. A. VENKITA-SUBRAMANIAN and R. VISWANATHAN

Distribution of unsaturated fatty acid in pyridoxine-deficient hypercholesterolaemia. By AJIT GOSWAMI and D. P. SADHU

The inhibition of photoreactions of chloroplasts by 2-alkyl-4-hydroxyquinoline *N*-oxides. By M. AVRON

Fatty acids in semen. By T. W. SCOTT, I. G. WHITE and E. F. ANNISON

Protective influence of hydrolysed product of 'glucose cycloacetoacetate' in experimental anaemia resulting from necrogenic diet. By M. C. NATH and K. VADALKAR

The lipotropic action of some halogen derivatives of acetic acid. By C. C. KRATZING and G. M. WINDRUM

Studies in the biosynthesis of fungal metabolites. 2. The biosynthesis of alternariol and its relation to other fungal phenols. By R. THOMAS

The metabolism of 3:5-di-*tert*-butyl-4-hydroxytoluene and 3:5-di-*tert*-butyl-4-hydroxybenzoic acid in the rabbit. By J. C. DACRE

Metabolic effects of α -oxobutyric acid: effect on respiration of rat-liver homogenates. By G. Y. N. Iyer, M. S. P. NAIR and M. SUKUMARAN

The determination of human-serum-cholinesterase activity with *o*-nitrophenyl butyrate. By A. R. MAIN, K. E. MILES and P. E. BRAID

Acetate utilization in sheep. By E. F. ANNISON and D. B. LINDSAY

Condensed tannins. 8. The isolation and distribution of interrelated heartwood components of *Schinopsis* spp. By D. G. ROUX and E. PAULUS

A new reagent for the assay of indole in the tryptophanase reaction. By J. M. TURNER

The prosthetic group of cytochrome oxidase:

1. Purification as porphyrin *a* and conversion into haemin *a*. By D. B. MORELL, J. BARRETT and P. S. CLEZY

2. Chemistry of porphyrin *a*. By P. S. CLEZY and J. BARRETT

Studies in the biosynthesis of fungal metabolites. 3. The biosynthesis of fungal perinaphthenones. By R. THOMAS

- Equilibrium constant of phosphoryl transfer from adenosine triphosphate to galactose in the presence of galactokinase. By M. R. ATKINSON, R. M. BURTON and R. K. MORTON
- Haemolysins in venoms of Australian snakes. Observations on the haemolysins of the venoms of some Australian snakes and the separation of phospholipase A from the venom of *Pseudechis porphyriacus*. By HAZEL M. DOERY and JOAN E. PEARSON
- The partition of solutes between buffer solutions and solutions containing hyaluronic acid. By A. G. OGSTON and C. F. PHELPS
- Condensed tannins. 9. Distribution of flavonoid compounds in the heartwoods and barks of some inter-related wattles. By D. G. ROUX, E. A. MAIHS and E. PAULUS
- A method for the identification of the immediate product of decarboxylation reactions. By R. F. PALMER
- Effects of trauma on incorporation of L-[³⁵S]cysteine into tissue glutathione. By L. V. BECK, SARAH KALSER and VIRGINIA ALEXANDER