

The BIOCHEMICAL JOURNAL

15 February 1979

Volume 178, No. 2

EDITORIAL BOARD

Chairman

J. T. Dingle

Deputy Chairmen

J. A. Lucy

A. P. Ryle

D. H. Williamson

R. E. Offord

P. M. Bayley*

J. W. Bradbeer

R. C. Bray

J. W. Bridges

D. N. Brindley

H. G. Britton

R. B. Cain

M. Cannon

J. B. Clark

A. J. Cornish-Bowden

D. D. Davies

R. M. Denton

F. M. Dickinson

R. R. Dils

G. J. Dutton

J. L. Gordon

D. E. Griffiths

L. A. Grivell

M. R. Hollaway

R. C. Hughes

A. J. Kenny

P. Lund

R. M. Marchbanks

C. I. Pogson

K. B. M. Reid

D. Robinson

D. Schulster

J. E. Scott

S. P. Spragg*

D. R. Stanworth

M. J. A. Tanner

R. T. Walker

Editorial Manager

A. G. J. Evans

*Nominated by the British
Biophysical Society

Overseas Advisory Panel

**H. Beinert (U.S.A.), H. F. DeLuca (U.S.A.), W. Fiers (Belgium), R. W. Hanson (U.S.A.),
O. Hayaishi (Japan), B. Hess (Germany), D. B. Keech (Australia), T. C. Laurent (Sweden),
L. F. Leloir (Argentina), R. Ross (U.S.A.), M. Schramm (Israel), A. Tissières (Switzerland),
A. D. Vinogradov (U.S.S.R.), O. Wieland (Germany)**



London: The Biochemical Society

THE BIOCHEMICAL SOCIETY

OFFICERS AND COMMITTEE, 1978-79

Chairman of the Committee
R. R. Porter, F.R.S.

Treasurer
D. F. Elliott

General Secretary
J. B. Lloyd

Publications Secretary
R. M. C. Dawson

Meetings Secretary
H. F. Bradford

Committee
G. B. Ansell
J. R. Bronk
E. G. Brown
N. G. Carr
P. H. Clarke, F.R.S.
J. T. Dingle*†
P. F. Fottrell
C. Green
M. I. Gurr
F. W. Hemming
H. K. King
J. C. Metcalfe

J. Mowbray*‡
I. H. M. Muir, F.R.S.
J. W. Porteous, F.R.S.E.
B. E. Ryman

**Ex officio* Member of Committee.
†Representative of Editorial Board
of the *Biochemical Journal*.
‡Representative of Group Secretaries.

Executive Secretary
A. I. P. Henton (7 Warwick Court, London WC1R 5DP)

The Biochemical Society exists to advance the science of biochemistry through meetings and publications. Several meetings a year are held, each at a different place; original papers are presented and special topics are discussed at symposia and colloquia.

Persons interested in biochemistry are eligible for election as Members. Details of further facilities accorded to Members, and forms of application for membership, are available from the Executive Secretary, The Biochemical Society, 7 Warwick Court, London WC1R 5DP [01-242 1076 (4 lines)].

NOTICE FOR CONTRIBUTORS

The *Biochemical Journal* places emphasis on the prompt publication of both **full-length papers** (on average about 6 months after receipt) and **rapid papers** (on average 10–12 weeks after receipt).

For detailed instructions on the preparation of papers contributors (who need not be members of the Biochemical Society) should refer to *Policy of the Journal and Instructions to Authors* [*Biochem. J.* (1978) **169**, 1–27] (obtainable free on request, in booklet form, from the Executive Secretary, The Biochemical Society, 7 Warwick Court, London WC1R 5DP).

Papers submitted for publication should be addressed to the Editorial Manager, *Biochemical Journal*, 7 Warwick Court, London WC1R 5DP.

Contributors should note that the *Biochemical Journal* makes no manuscript handling charges, no page charges and no charges for plates. Reprints are available at modest cost at about the same time as publication, and, if an author is a member of the Biochemical Society, 50 reprints are provided free of charge.

NOTICE FOR SUBSCRIBERS

The **Biochemical Journal** is published and distributed by the Biochemical Society. It is published twice monthly, alternate issues being devoted to **Molecular Aspects** and to **Cellular Aspects** of biochemistry. It is planned that in 1979 eight volumes, each volume being made up of three issues, will be published according to the following schedule:

Molecular Aspects			Cellular Aspects		
1979	Vol.	Part	1979	Vol.	Part
1 Jan.	177	1	15 Jan.	178	1
1 Feb.	177	2	15 Feb.	178	2
1 Mar.	177	3*	15 Mar.	178	3*
1 Apr.	179	1	15 Apr.	180	1
1 May	179	2	15 May	180	2
1 June	179	3*	15 June	180	3*
1 July	181	1	15 July	182	1
1 Aug.	181	2	15 Aug.	182	2
1 Sept.	181	3*	15 Sept.	182	3*
1 Oct.	183	1	15 Oct.	184	1
1 Nov.	183	2	15 Nov.	184	2
1 Dec.	183	3*	15 Dec.	184	3*

*Completes volume, and includes Indexes.

Biochemical Society Transactions. This is a separate publication (see below). Volume 7 will be published in 1979, in six parts.

Subscription Rates to the Biochemical Journal. For non-members of the Biochemical Society the subscription rates for 1979 are shown below.

Subscribers to the *Biochemical Journal* can subscribe to *Biochemical Society Transactions* on a joint subscription, saving £15.00 (U.K. and Ireland) or \$25.00 (elsewhere). The methods of despatch of both publications are shown below.

Terms are cash with order or against proforma invoice. Orders and subscriptions should be sent to the Biochemical Society Book Depot, P.O. Box 32, Commerce Way, Colchester CO2 8HP, Essex, or through your normal agent.

Claims regarding issues lost or damaged in transit should be addressed to the Biochemical Society at the address given in the preceding paragraph. Claims cannot be entertained if they are received later than three months after the date of posting, plus such time as would be expected for transit by post.

Back Numbers. Enquiries for volumes 1-19 of the Journal should be addressed to William Dawson & Sons Ltd., Back Issues Department, Cannon House, Park Farm Road, Folkestone, Kent. Quotations for available issues of subsequent volumes and parts of the Journal, and also of Transactions, may be obtained on application to The Biochemical Society Book Depot, P.O. Box 32, Commerce Way, Colchester CO2 8HP, Essex.

Microforms. The following versions are available.

(a) Microfilm (36 mm): Volumes 1-101.

(b) Microfiche (98-image): Volumes 102-176.

Details and prices are available on request from the Biochemical Society's Colchester office.

Advertisements. Applications for advertising space should be sent to the Advertising Department, The Biochemical Society, 7 Warwick Court, London WC1R 5DP [01-242 1076 (4 lines)]. Copy is required eight weeks before publication date. Rate cards are available on request.

IMPORTANT NOTICE. All subscribers outside the U.K. and Ireland must remit in U.S. \$ or the sterling equivalent at the rate of exchange prevailing at the date of payment.

	U.K. & Ireland only	U.S.A., Canada & Mexico	Japan only	Overseas
1 year (8 volumes)	£170.00	U.S. \$350.00	U.S. \$360.00	U.S. \$310.00
Per volume	£22.00	U.S. \$48.00	U.S. \$49.00	U.S. \$42.00
Per part	£8.00	U.S. \$17.00	U.S. \$17.50	U.S. \$15.00

Airfreight to U.S.A., Canada and Mexico. The subscription rates for North America include an element for this service.

Accelerated Surface Post to Japan only. The subscription rates include a 10% surcharge for this service.

INDEX OF AUTHORS

	PAGE		PAGE		PAGE
Albano, E.	509	Haslam, R. J.	397	Quintart, J.	433
Anthony, C.	353	Hems, D. A.	493		
Apitz-Castro, R.	449	Heron, C.	415	Ragan, C. I.	415
Asagami, H.	331	Hess, E. J.	305	Raul, F.	407
		Hino, Y.	323, 331	Ribbi-Jaffe, A.	449
Bartholeyns, J.	433	Howell, S. L.	367	Robinson, D. S.	455
Baudhuin, P.	433	Hubert, E.	467	Rodrigues, L. M.	493
Beesley, R. C.	299			Roscic, O.	467
Brenchley, G. V.	361	Irvine, R. F.	497		
Bronk, J. R.	505			Shabarova, Z. A.	339
		Kedinger, M.	407	Shalamberidze, M. V.	339
Campbell, M. T.	443	Keir, H. M.	391	Shears, S. B.	505
Carlstedt, I.	257	Kirk, C. J.	493	Shohami, E.	271
Ch'ih, J. J.	501	Kivirikko, K. I.	313	Shyamala, G.	345
Cöster, L.	257	Koren, R.	271	Simon, P. M.	407
		Kozlov, I. A.	339	Singh, B.	427
Datta, A.	427	Kuutti-Savolainen, E.-R.	313	Sjöberg, I.	257
Dawson, R. M. C.	497			Slater, T. F.	509
Devlin, T. M.	501	Letcher, A. J.	497	Sokolova, N. I.	339
Dianzani, M. U.	509	Lynham, J. A.	397	Streffler, C.	467
Dice, J. F.	305			Suri, B. S.	455
Docherty, K.	361	Majamaa, K.	313		
		Malmström, A.	257	Tamulevicius, P.	467
Faust, R. G.	299	McBlain, W. A.	345	Targ, M. E.	455
Fox, J. E. B.	397	McNurlan, M. A.	373	Taylor, W. M.	381
Fransson, L.-Å.	257	Melvin, M. A. L.	391	Tomkins, A. M.	373
		Minakami, S.	323, 331	Tuderman, L.	313
Garlick, P. J.	373			Tyhurst, M.	367
Goldberg, A. L.	305, 475	Netrusov, A. I.	353	Tyler, D. D.	289
Gore, M. G.	415	Novikova, I. Y.	339		
Gravela, E.	509			Webb, P. R.	289
Grenier, J. F.	407	Odessey, R.	475	Weiser, M. M.	279
				Wishart, G. J.	443
Haffen, K.	407	Podolsky, D. K.	279		
Hales, C. N.	361	Poli, G.	509		
Halperin, M. L.	381	Procyk, R.	501		