

biochemical society transactions

1978

Vol. 6, No. 1

Managing Editor

D. C. WATTS

Book Reviews Editor

B. MORELAND

London: the biochemical society © 1978

Biochemical Society Transactions contains scientific reports of Society Colloquia and Members' Communications presented at the Biochemical Society's Meetings held in various parts of the U.K. and Ireland and, occasionally, in conjunction with other Societies, abroad. Short Biochemical Reviews, Book Reviews, Special Lectures of the Society and other information of biochemical interest are also included. Research papers are not accepted for publication directly.

Manuscripts reporting contributions to a Society Meeting must conform to the style of the *Biochemical Journal*. For general guidance see *Biochem. J.* (1978) **169**, 1-27. Data should be expressed in SI units [see *Pure Appl. Chem.* (1970) **21**, 1-44; *Quantities, Units and Symbols* (1971) The Royal Society, London]. Typescripts are technically sub-edited, but are not edited for scientific content, which is entirely the responsibility of the authors.

In 1978 Volume 6 will be published. This will be in six parts published at approximately bi-monthly intervals. The subscription to non-members will be as follows.

	U.K. & Ireland only	U.S.A., Canada & Mexico	Other Overseas Destinations
1 year (6 parts)	£32.00	U.S. \$60.00	U.S. \$55.00
1 part	£5.40	U.S. \$10.50 (includes an element for Airfreight)	U.S. \$10.00 (Japan plus 10% surcharge for Accelerated Surface Post)

SAVE: £15.00 (U.S. \$25.00)

A combined subscription with the *Biochemical Journal* is offered at the following rates:

U.K. & Ireland only	U.S.A., Canada & Mexico	Other Overseas Destinations
£187.00	U.S. \$355.00 (includes an element for Airfreight)	U.S. \$330.00 (Japan plus 10% surcharge for Accelerated Surface Post)

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.

Orders, back numbers and lost copies. Orders, enquiries for back numbers and claims regarding issues lost or damaged should be addressed to: Biochemical Society Book Depot, P.O. Box 32, Commerce Way, Whitehall Road Industrial Estate, Colchester CO2 8HP.

No claims can be considered if they are received later than three months after the date of posting of *Transactions*, plus such time as would be expected for transit by post.

Back issues of *Biochemical Society Transactions* are available at the following prices:

Volumes 1 and 2 each	£15.00 (\$40.00) [single parts £3.00 (\$8.00)]
Volume 3	£18.00 (\$40.00) [single parts £3.20 (\$8.00)]
Volume 4	£24.00 (\$60.00) [single parts £4.20 (\$10.50)]
Volume 5	£28.00 (\$60.00) [single parts £4.80 (\$11.50)]

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.

The Biochemical Society exists to advance the science of biochemistry through meetings and publications. Meetings are held at different places; 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 [Telephone 01-242 1076 (4 lines)].

Second-class postage paid at New York, NY, U.S.A.

INDEX OF AUTHORS

- Agutter, P. S. 271
 Akrawi, A. F. 233
 Alam, A. 195
 Allen, M. B. 176
 Anderson, P. A. 263
 Antoniw, J. F. 248
 Aragon, C. 176
 Armitage, M. 91
 Atkins, G. L. 209
 Atkinson, T. 315
 Aunis, D. 312
 Aylward, J. H. 25
- Bailey, G. S. 233
 Bailey, I. A. 302
 Baines, B. S. 255, 261
 Baker, H. 123
 Baldwin, R. W. 133
 Bamforth, C. W. 193
 Barnekow, A. 184
 Barrell, B. G. 63
 Barrett, M. C. 161
 Bauermeister, A. 209, 222
 Baxter, M. A. 154
 Beavis, J. M. 180
 Belin, J. 289
 Bender, D. A. 120
 Berry, C. 178
 Billah, M. M. 285
 Billington, D. 286, 288
 Bingham, A. H. A. 315
 Bingham, P. 178
 Blair, J. A. 297
 Blenkinsop, R. D. 261
 Bloomfield, G. A. 57
 Blow, A. M. J. 284
 Blumenthal, T. 52
 Booth, R. F. G. 128
 Borrebæk, B. 83
 Bot, G. 21
 Botham, G. M. 284
 Bracke, M. 227
 Branford White, C. J. 113
 Bremer, J. 83
 Breuer, H. 136
 Brocklehurst, D. 239
 Brocklehurst, K. 217, 250, 253, 255, 261, 269
 Brophy, P. J. 280
 Brown, J. P. 47
 Brown, S. 52
 Buchan, P. 135
 Burchell, A. 220
 Burges, R. A. 152
 Butterworth, K. R. 145
- Caldwell, J. 242, 246
 Campbell, M. T. 175
 Campbell, R. S. 149
 Carpanini, F. M. B. 145
 Carreira, J. 276
 Cattan, A. R. 220
 Chalmers, R. A. 108, 111
 Chapman, A. G. 115
 Chappell, J. B. 9, 180
 Chou, T.-H. 187
 Christiansen, R. Z. 83
 Chu, M. M. 97
 Chuang, D. T. 11
 Churcher, J. A. 261
 Clark, J. B. 126, 128
 Cohen, P. 17, 220
 Cole, R. J. 169
 Coleman, R. 286, 288
 Cooke, K. B. 212
 Coore, H. G. 154
 Coulton, L. A. 239
 Crawford, M. 96
 Croft, J. E. 246
 Crook, E. M. 269
 Curtis, C. G. 141
- Dakshinamurti, K. 119
 de Matteis, F. 94
 Demester, J. 227
 Dengler, K. 136
 Dils, R. 133
 Dobrota, M. 291
 Dreyfus, H. 172, 312
 Duff, D. A. 160
- Eisenthal, R. 190
 El-Aaser, A. A. A. 291
 Emes, M. J. 203
 Emudianughe, T. S. 242
 Engel, P. C. 76
 Evans, W. H. 276
- Falconer, I. R. 133
 Feliu, J. E. 29
 Fiddes, J. C. 63
 Finean, J. B. 285
 Fisher, S. K. 101
 Fitzsimons, J. T. R. 291
 Flockhart, D. A. 278
 Flook, A. 260
 Forsyth, I. A. 133
 Foster, J. F. 147
 Fowler, M. W. 203
- Galton, D. J. 102, 105
 Gangolli, S. D. 145
 Garratt, C. J. 302
- Gaunt, J. K. 143
 Gergely, P. 21
 Gimenez, C. 176
 Gittins, M. 212
 Giudice, L. C. 57
 Godson, G. N. 63
 Gooderham, K. 242
 Gorringe, D. M. 167
 Gotto, A. M., Jr. 106
 Grasso, P. 145
 Grayson, J. E. 197
 Gregory, H. 304
 Griffin, M. C. A. 225
 Griffin, W. G. 225
 Griffiths, J. R. 164, 258
- Hallinan, T. 178
 Hardy, J. F. 113
 Harris, J. R. 271, 308
 Harrison, R. 190
 Harrison, R. A. 47
 Harth, S. 172, 312
 Hastings, J. R. B. 242
 Hems, D. A. 33
 Hesketh, T. R. 46
 Hess, B. 11
 Higgins, A. J. 152
 Hinton, R. H. 274, 291
 Holdsworth, G. 105
 Höller, M. 136
 Holmgren, A. 50
 Hopkins, C. R. 304
 Horton, A. A. 161
 Horton, R. W. 115
 Howell, R. M. 235
 Hue, L. 29
 Hukins, D. W. L. 238
 Hutson, D. H. 96
- Illing, H. P. A. 89
 Ingleton, P. M. 239
- Jamieson, J. M. 220
 Jeffrey, J. 205
 Jervis, L. 263
 Johns, E. W. 242
 Johnson, S. M. 289
 Joseph, M. H. 123
 Jurd, R. D. 266
- Kakkar, V. V. 214
 Karlsson, G.-B. 50
 Keightley, C. A. 46
 Kessel, D. 187
 Khilanani, P. 187
 Khilji, M. A. 233

- Killilea, S. D. 25
 Kruijt, J. K. 147
 Kyffin, T. W. 266
- Lake, B. G. 145
 Lane, D. A. 214
 Langslow, D. R. 149
 Large, P. J. 193
 Lauwers, A. 227
 Lawson, A. M. 108, 111, 123
 Lee, A. G. 43, 281
 Lee, E. Y. C. 25
 Lei, F. H. 297
 Lisboa, B. P. 136
 Little, P. F. R. 242
 Lopes-Cardozo, M. 98
 Lucas, M. L. 297
 Lucy, J. A. 284
 Luzio, J. P. 278
- Mabood, S. F. 305
 MacGregor, I. R. 214
 Madhavankutty, K. 97
 Malcolm, A. D. B. 241
 Malthouse, J. P. G. 217, 250, 261
 Mandel, P. 172, 312
 Mangkornthong, P. 297
 Marsh, D. 42
 Martin, J. 239
 Mason, R. M. 244
 Meldrum, B. S. 115
 Mellgren, R. L. 25
 Metcalfe, J. C. 46
 Michell, R. H. 285
 Middleton, B. 80
 Miller, W. R. 135
 Milne, J. F. 271, 308
 Milner-White, E. J. 220
 Mitchell, S. C. 91
 Moffatt, J. R. 241
 Morgan, G. 106
 Morris, G. E. 169
 Morville, M. 152
 Moses, V. 167
 Mullock, B. M. 274
 Murphy, D. M. 97
 Mushiri, M. S. 253, 261
- Neskovic, N. 172
 Newman, P. F. J. 305
 Nimmo, G. A. 17
 Nimmo, I. A. 209, 305
 Northrop, F. D. 63
- O'Doherty, P. J. A. 103
 O'Donnell, J. 97
 Ormerod, F. 261
 Osmundsen, H. 84
- Packard, C. J. 106
 Packter, N. M. 195
 Park, M. V. 70
 Parry, T. J. 141
 Patel, T. B. 126
 Patsch, J. R. 106
 Pearson, A. G. M. 200
 Pearson, J. P. 244
 Perham, R. N. 47, 225
 Perrett, D. 164
 Pescheloche, M. 312
 Pette, D. 9
 Pickard, M. R. 129
 Pierce, J. G. 57
 Pierpoint, W. S. 248
 Pike, V. W. 269
 Plumpton, E. S. 143
 Powell, G. M. 141
 Preston, C. J. 239
 Price, N. C. 220
- Rahim, Z. H. A. 164
 Ramsay, R. R. 72
 Read, I. D. 304
 Reid, E. 291
 Rezvan, H. 235
 Richards, C. 46
 Rickwood, D. 266
 Robinson, P. 260
 Rogers, J. 281
 Rosen, A. 207
 Rowe, C. E. 101
- Sargent, J. 222
 Scott, J. E. 266
 Scrutton, M. C. 182
 Seelig, J. 40
 Shaw, D. C. 63
 Shaw, M. A. 205
 Shepherd, J. 106
 Sherratt, H. S. A. 84
 Sheterline, P. 229, 231
 Shipton, M. 217
 Shotton, D. M. 38
 Shukla, S. D. 285
 Siddle, K. 278
 Siebert, G. 5
 Smith, A. D. 289
 Smith, G. A. 46
 Smith, G. D. 190
 Smith, M. T. 131
 Smith, R. L. 242, 246
- Smith, W. R. D. 120
 Smyth, D. G. 61
 Snell, C. R. 138
 Snell, K. 157, 160
 Spencer, J. A. 161
 Steyaert, H. 227
 Stocks, J. 102
 Stockton, J. 200
 Strange, P. G. 129
 Stringfellow, L. 52
 Stubbs, C. D. 289
 Stubbs, G. 271
 Stubbs, M. 260
 Stuchbury, T. 255
 Suschitzky, H. 253
 Swanston, S. K. 297
- Tanford, C. 46
 Taylor, K. G. 105
 Tham, S.-Y. 207
 Nguyen Thi Man, 169
 Tombs, M. P. 260
 Tsang, W. M. 289
 Tubbs, P. K. 68
 Turner, A. J. 200
- Unwin, N. 38
 Urban, P. F. 172
 Utter, M. F. 11
- Van Berkel, T. J. C. 147
 Van den Bergh, S. G. 98
 Van den Besselaar, A. M. H. P. 280
 Venis, M. A. 325
- Walker, D. G. 176
 Walker, J. E. 63
 Walker, J. M. 242
 Wallace, S. M. 302
 Waring, R. H. 91
 Watson, K. 293
 West, L. J. 200
 Westwood, S. A. 278
 Wharton, C. W. 269
 Whyte, A. 299
 Wilson, B. M. 133
 Wilton, D. C. 281
 Wirtz, K. W. A. 280
 Wishart, G. J. 175
 Woodhead-Galloway, J. 238
 Wright, M. G. 145
- Yon, R. J. 197
 Young, R. A. 52
- Ziegler, D. M. 94