

Journal of Pharmaceutical and Biomedical Analysis

Joint Editors in Chief

Dr A. F. Fell Department of Pharmacy, Heriot-Watt University, 79 Grassmarket, Edinburgh, EH1 2HJ, U.K.
Professor J. N. Miller Department of Chemistry, University of Technology, Loughborough, Leicestershire, LE11 3TU, U.K.

Associate Editors

F. L. Mitchell Division of Clinical Chemistry, Clinical Research Centre, Watford Road, Harrow, Middlesex HA1 3UJ, U.K.

T. C. O'Haver Department of Chemistry, University of Maryland, College Park, MD 20742, U.S.A.

Regional Advisory Editors

G. A. Brewer Assistant Director, Analytical Research, E. R. Squibb & Sons, Inc., Georges Road, New Brunswick, NJ 08903, U.S.A.

R. W. Frei Department of Analytical Chemistry, Free University of Amsterdam, de Boelelaan 1083, 1081 HV Amsterdam, The Netherlands

S. Görög Chemical Works of Gedeon Richter Ltd, P. O. Box 27, H-1475, Budapest 10, Hungary

T. Nambara Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980, Japan

Editorial Advisory Board

C. A. Johnson (London) *Chairman*

E. Bayer (Tübingen)

J. W. Bridges (Guildford)

H. Bundgaard (Copenhagen)

C. Burgess (Barnard Castle)

J. P. Cano (Marseilles)

L. Chafetz (Morris Plains, NJ)

R. A. Chalmers (Aberdeen)

J. Chamberlain (Milton Keynes)

S. Ebel (Marburg/Lahn)

J. E. Fairbrother (Sligo, Eire)

A. G. Fogg (Loughborough)

E. Gelpí (Barcelona)

W. Godolphin (Vancouver)

W. J. Hensley (Sydney, N.S.W.)

T. Higuchi (Lawrence, KS)

J. F. K. Huber (Vienna)

J. H. Knox (Edinburgh)

B. A. Lodge (Ottawa)

D. L. Massart (Brussels)

A. C. Moffat (Aldermaston)

W. J. van Oort (Utrecht)

T. L. Paál (Budapest)

S. Pinzauti (Florence)

G. Schill (Uppsala)

J. A. F. de Silva (Nutley, NJ)

G. Smith (Edinburgh)

R. V. Smith (Austin, TX)

L. A. Sternson (Lawrence, KS)

M. J. Stewart (Glasgow)

P. B. Stockwell (London)

E. Tomlinson (Amsterdam)

D. Westerlund (Södertälje)

H. M. Widmer (Basel)

J. D. Winefordner (Gainesville, FL)

D. S. Young (Rochester, MN)

Published quarterly. Publishing and Advertising Offices: Headington Hill Hall, Oxford OX3 0BW.

Annual Subscriptions for 1983: For Libraries, Research Establishments, industrial and all other multiple-reader institutions: U.S. \$60.00 per annum (including postage and insurance). 2 year subscription 1983-84 \$114.00. Payment must be made in advance. Subscription enquiries from customers in North America should be sent to: PERGAMON PRESS INC. MAXWELL HOUSE, FAIRVIEW PARK, ELMSFORD, NY 10523, U.S.A., and for the remainder of the world to: PERGAMON PRESS LTD., HEADINGTON HILL HALL, OXFORD OX3 0BW, U.K.

Microform Subscriptions and Back Issues Back issues of all previously published volumes are available in the regular editions and on microfilm and microfiche. Current subscriptions are available on microfiche simultaneously with the paper edition and on microfilm on completion of the annual index at the end of the subscription year.

Copyright © 1983, Pergamon Press Ltd.

It is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. However, assignment of copyright is not required from authors who work for organizations which do not permit such assignment. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature and translations. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise, without permission in writing from the copyright holder.

U.S. Copyright Law applicable to users in the U.S.A.

The Article Fee Code on the first page of an article in this journal indicates the copyright owner's consent that, in the U.S.A., copies may be made for personal or internal use provided the stated fee for copying, beyond that permitted by Section 107 or 108 of the United States Copyright Law, is paid. The appropriate remittance should be forwarded with a copy of the first page of the article to the Copyright Clearance Center Inc., 21 Congress Street, Salem, MA 01970. If a code does not appear copies of the article may be made without charge, provided permission is obtained from the publisher. The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works or for resale. Specific written permission must be obtained from the publisher for such copying. In case of doubt please contact your nearest Pergamon office.

PERGAMON PRESS

HEADINGTON HILL HALL, OXFORD OX3 0BW, U.K.

MAXWELL HOUSE, FAIRVIEW PARK, ELMSFORD, NY 10523, U.S.A.