## CARBOHYDRATE POLYMERS

# An International Journal Devoted to Scientific and Technological Aspects of Industrially Important Polysaccharides

Carbohydrate Polymers provides a forum for the publication of papers relating to the scientific study and technological exploitation of polymers which have, or potentially offer, industrial applications in fields such as food, textiles, paper, wood, adhesives, pharmaceuticals and industrial chemistry.

The journal will welcome reports of studies of the structure and the chemical and physical properties of such polymers, as well as investigations relating to their biological and industrial development, analytical methods, and their chemical and microbiological modifications and interactions with other materials.

An important, and perhaps unique, feature of this new journal will be the free exchange of information, and close co-operation, between its Editors and those of Carbohydrate Research. This latter journal, approaching its 100-th volume, is internationally renowned as the forum for the publication of papers in which the emphasis is on pure and applied research. Carbohydrate Polymers and Carbohydrate Research will, therefore, complement each other, and together will provide a complete coverage of the field.

#### Types of contributions

Research papers, review articles, short communications, technical notes, book reviews and letters to the Editors.

## Special regulations for readers in the USA

This journal has been registered with the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA. Consent is given for copying of articles for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition that the copier pay through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 and 108 of the US Copyright Law. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works.

### Subscriptions

Four issues per volume—one volume per year (volume approx. 320 pages). Subscription price for 1983 (Volume 3): UK, £47.00; Overseas, £55.00. All prices include postage and packing. Subscriptions for delivery to USA, Canada, Japan and Australia are air-speeded at no extra charge. Subscription orders should be addressed to:

APPLIED SCIENCE PUBLISHERS LTD, Ripple Road, Barking, Essex, England

Note: The selection and presentation of material and the opinions expressed in this publication are the sole responsibility of the authors concerned.

### LIST OF MEMBERS OF EDITORIAL BOARD

- Professor G. O. Aspinall, Department of Chemistry, York University, 4700 Keele Street, Downsview, Ontario M3J 1P3, Canada
- Dr E. D. T. Atkins, H. H. Wills Physics Laboratory, University of Bristol, Tyndall Avenue, Bristol BS8 1TL, England.
  Mr J. M. V. Blanshard, Department of Applied Bio-
- chemistry and Nutrition, School of Agriculture, University of Nottingham, Sutton Bonington, Loughborough LE12,
- 5RD, England. (Editor)

  Dr W. Burcherd, Institute of Macromolecular Chemistry,
  University of Freiburg, D-7800 Freiburg, West Germany.

  Dr H. Chanzy, Centre de Recherches sur les Macromolécules Végétales, C.N.R.S., 53X, 38041, Grenoble Cédex, France.
- Professor D. C. Ellwood, PHLS Centre for Applied Microbiology and Research, Porton Down, Salisbury SP4 0JG, England.
- Professor H. Flowers, Department of Biophysics, The Weizmann Institute of Science, Rehovot, Israel.
- Dr M. Glicksman, General Foods Corporation, Tarrytown, NY 10591, USA.
- Professor T. Harada, Institute of Scientific & Industrial Research, Osaka University, Yamadakami, Suita-shi, Osaka 565, Japan.
- Dr J. F. Kennedy, Department of Chemistry, University of Birmingham, P.O. Box 363, Birmingham B15 2TT, England.
- Dr C. W. Lawson, Tate & Lyle Ltd., P.O. Box 68, Reading RG6 2BX, England.
- Professor B. Lindberg, Department of Organic Chemistry, Arrhenius Laboratory, University of Stockholm, S-106 91 Stockholm, Sweden.
- Professor D. J. Manners, Department of Brewing and Biological Sciences, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX, Scotland.
- Dr R. H. Marchessault, Xerox Research Centre of Canada Ltd., 2480 Dunwin Drive, Mississauga, Ontario L5L 1J9, Canada
- Dr J. R. Mitchell, Department of Applied Biochemistry and Nutrition, School of Agriculture, University of Nottingham, Sutton Bonington, Loughborough LE12 5RD. England. (Editor)

- Dr E. Morris, Unilever Research, Colworth House, Sharnbrook, Bedford MK44 1LQ, England.
- Professor H. Neukom, Department of Food Science, Swiss Federal Institute of Technology, 2 Universitatstrasse, CH-8092, Zurich, Switzerland.
- Professor W. Pilnik, Department of Food Science, Agricultural University, De Dreijen 12 6703 BC Wageningen, The Netherlands.
- Professor V. S. R. Rao, Indian Institute of Science, Molecular Biophysics Unit, Bangalore 560012, India.
- Professor O. Smidsrod, Institute of Marine Biochemistry, University of Trondheim, 7034-Trondheim-NTH, Norway.
- Professor C. K. Rha, Food Materials Science and Fabrication Laboratory, Department of Nutrition and Food Science, Room 56-137, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, USA.
- Dr P. A. Sandford, Kelco Research, 8355 Aero Drive, San Diego, California 92123, USA.
- Dr G. Stainsby, Proctor Department of Food Science, University of Leeds, Leeds LS2 9JT, England.
- Professor B. A. Stone, Department of Biochemistry, La Trobe University, Bundoora, Victoria 3083, Australia.
- Dr I. W. Sutherland, Department of Microbiology, School of Agriculture, West Mains Road, Edinburgh EH9 3JG, Scotland.
- Professor V. B. Tolstoguzov, Institute of Organoelement Compounds, USSR Academy of Sciences, Moscow, USSR.
- Dr G. Towle, Hercules Incorporated, 910 Market Street, Wilmington, Delaware 19899, USA.
- Professor S. G. Whittington, Department of Chemistry, University of Toronto, Lash Miller Chemical Laboratories, 80 St. George Street, Toronto, Ontario, M5S 1A1. Canada.
- Dr H. F. Zobel, CPC International, Moffet Technical Center, Box 345, Summit-Argo, Illinois 60501, USA.