

Editors

PROFESSOR J. F. KENNEDY

Professor of Applied Chemistry,
The North East Wales Institute, Deeside, Clwyd, UK,
and Director
Birmingham Carbohydrate and
Protein Technology Group,
School of Chemistry,
University of Birmingham,
Birmingham B15 2TT, UK
e-mail: jfkennedy@chemistry.bham.ac.uk

PROFESSOR J. R. MITCHELL

Department of Applied Biochemistry and Nutrition,
School of Agriculture, University of Nottingham,
Sutton Bonington, Loughborough LE12 5RD, UK
e-mail: sczjrm@szn1.nott.ac.uk

DR P. A. SANDFORD

Vice President, Technology Development, VivoRx, Inc.,
2825 Santa Monica Boulevard,
Santa Monica, CA 90404, USA

Editorial Board

R. Amadò

Swiss Federal Institute of Technology, Zurich,
Switzerland

E. D. T. Atkins

University of Bristol, UK

J. E. BeMiller

Purdue University, West Lafayette, Indiana, USA

C. G. Biliaderis

Aristotle University, Thessaloniki, Greece

J. M. V. Blanshard

School of Agriculture, University of Nottingham,
Loughborough, UK

W. Burchard

University of Freiburg, Germany

H. Chanzy

Centre de Recherches sur les Macromolécules
Végétales, Grenoble, France

V. Crescenzi

University of Rome, Italy

I. C. M. Dea

Leatherhead Food R.A., UK

W. M. Doane

Agricultural Utilization Research, Illinois, USA

A. Harada

Osaka University, Toyonaka, Osaka, Japan

C. A. Knutson

US Department of Agriculture, Peoria, Illinois, USA

B. Lindberg

University of Stockholm, Sweden

L. L. Lloyd

Chembiotech Ltd, Birmingham, UK

W. Mackie

University of Leeds, UK

B. V. McCleary

Megazyme International Ireland Ltd, Bray,
Co. Wicklow, Ireland

D. J. Manners

Heriot-Watt University, Edinburgh, UK

R. Marchessault

McGill University, Quebec, Canada

E. R. Morris

Cranfield Institute of Technology, Bedford, UK

V. J. Morris

Food Research Institute, Norwich, UK

R. A. A. Muzzarelli

University of Ancona, Italy

L. Piculell

Chemical Center, Lund University, Sweden

S. Pricl

University of Trieste, Trieste, Italy

C. K. Rha

Massachusetts Institute of Technology, Cambridge, USA

S. B. Ross-Murphy

University of London, London, UK

P. Seib

Kansas State University, Kansas, USA

O. Smidsrod

University of Trondheim, Norway

B. A. Stone

La Trobe University, Bundoora, Victoria, Australia

R. J. Sturgeon

Heriot-Watt University, Edinburgh, UK

I. W. Sutherland

Institute of Cell and Molecular Biology, Edinburgh, UK

J.-F. Thibault

INRA, Nantes, France

S. Tokura

Department of Polymer Science, Hokkaido University,
Sapporo, Japan

V. B. Tolstoguzov

Nestle Research Center Lausanne, Lausanne, Switzerland

J. Vercellotti

V-LABS, Inc, LA, USA

C. A. White

Fisher Scientific Equipment, Loughborough, Leics, UK

P. A. Williams

North East Wales Institute, Wrexham, UK

W. T. Winter

State University of New York, NY, USA

M. Yalpani

BioPolymer Technologies International Inc.,
Westborough, Massachusetts, USA

H. F. Zobel

ABC V Starch Associates, Darien, Illinois, USA

SUBSCRIPTIONS

Annual Institutional Subscription Rates 1997: Europe, The CIS and Japan 2272 Dutch Guilders. All other countries US\$1403. Dutch Guilder prices exclude VAT. Non-VAT registered customers in the European Community will be charged the appropriate VAT in addition to the price listed. Prices include postage and insurance and are subject to change without notice. Any enquiry relating to subscriptions should be sent to:

The Americas: Elsevier Science, Customer Support Department, P.O. Box 945, New York, NY 10010, USA. [Tel: (+1)212-633-3730/1-888 4ES-INFO. Fax: (+1)212-633-3680. E-mail: usinfo-f@elsevier.com].

Japan: Elsevier Science Customer Support Department, 9-15 Higashi-Azabu 1-chome, Minato-ku, Tokyo 106, Japan. [Tel: (+3)5561-5033. Fax: (+3)5561-5047. E-mail: info@elsevier.co.jp].

Asia Pacific (excluding Japan): Elsevier Science (Singapore) Pte Ltd, No. 1 Temasek Avenue, 17-01 Millenia Tower, Singapore 039192. [Tel: (+65)434-3727. Fax: (+65)337-2230. E-mail: asiainfo@elsevier.com.sg].

Rest of the World: Elsevier Science Customer Service Department, P.O. Box 211, 1001 AE Amsterdam, The Netherlands. [Tel: (+31)20-485-3757. Fax: (+31)20-485-3432. E-mail: nlinfo-f@elsevier.nl].

For orders, claims, product enquiries (no manuscript enquiries) please contact the Customer Support Department at the Regional Sales Office nearest to you. Periodicals postage paid at Rahway, NJ. *Carbohydrate Polymers* (ISSN 0144-8617) is published monthly in three volumes, four issues per volume (Volumes 32-34) by Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. The annual subscription in the USA is \$1403. *Carbohydrate Polymers* is distributed by Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001-2413. Postmaster: please send address corrections to *Carbohydrate Polymers*, c/o Elsevier Science, RSO, Customer Support Department, 655 Avenue of the Americas, New York, NY 10010, USA [Tel: (+1) 212-633-3730/1-888 4ES-INFO. Fax: (+1) 212-633-3680. E-mail: usinfo-f@elsevier.com].

Back Issues: Back issues of all previously published volumes are available direct from Elsevier Science Offices (Oxford and New York). Complete volumes and single issues can be purchased for 1991-1996. Earlier issues are available in high quality photo-duplicated copies as complete volumes only. Back volumes on microfilm are available from UMI, 300 North Zeeb Road, Ann Arbor, MI 48106, USA.



ContentsDirect delivers the table of contents of this journal, by e-mail, approximately two to four weeks prior to each issue's publication. To subscribe to this free service complete and return the form at the back of this issue or send an e-mail message to cdsubs@elsevier.co.uk