

# CARBOHYDRATE POLYMERS

## A Journal Devoted to Scientific and Technological Aspects of Industrially Relevant Polysaccharides

### *Aims and Scope*

*Carbohydrate Polymers* is a major journal within the field of glycoscience, and covers the study and exploitation of polysaccharides which have current or potential application in areas such as bioenergy, bioplastics, biomaterials, nanotechnology, biorefining, drug delivery, tissue engineering, food, chemistry, packaging, paper, pharmaceuticals, medicine, oil recovery, textiles and wood.

Research must be innovative and advance scientific knowledge.

The role of the well-characterized carbohydrate polymer must be the major proportion of the work reported, not peripheral. At least one named carbohydrate polymer must be cited and be the main focus of the title of the paper, and of the paper itself. It is essential that authors provide convincing evidence that the carbohydrate polymer is of high purity. Where a polysaccharide is obtained from a supplier, essential structural information which will affect its behavior in the subsequent work should be given. For example, molecular size/viscosity information, mannuronate/gulonate ratio for alginates, degree of esterification for pectin, degree of deacetylation for chitosan. Editors are unlikely to send papers for formal review with a statement such as "sodium alginate was purchased from XXX Inc." unless additional information is supplied. To be acceptable, the paper must include some characterization of the polysaccharide (if not already known) in addition to the application studied. Characterization by the authors is usually preferable to values quoted from the manufacturer, since manufacturer values may be averages or ranges rather than pertinent to the particular lot in question. If the study is concerned with a new polysaccharide the monosaccharide composition, linkage information, and preferably molecular weight and/or degree of polymerization must be supplied. It is acceptable to refer to previously published work but if this is not in the literature it is necessary to make the appropriate measurements and supply the information in the submitted paper.

Topics include:

- structure and property relationships
- analytical methods
- chemical, enzymatic and physical modifications
- biosynthesis (natural, or new sequence generation) of the polysaccharide
- natural functions (including biological activities)
- interactions with other materials

Examples of papers which are not appropriate for *Carbohydrate Polymers* include:

- papers which focus on biological, physiological and pharmacological aspects of non-carbohydrate molecules attached to, or mixed with, carbohydrate polymers.
- papers on the materials science of biocomposites where there is no mention of any specific carbohydrate polymer, or the role of the carbohydrate polymer is not the major proportion of the study.
- papers focusing on polyalkanoates, polylactic acid, saponins or lignin.
- routine studies of extraction yields without characterisation of the extracted polysaccharide.
- routine studies of complexation of a drug with a single cyclodextrin.
- applications of new polysaccharides where the structure of the polysaccharide is unknown.
- papers on the production and isolation of enzymes which act on polysaccharides
- papers where the degree of polymerization of the saccharide chain is less than four.
- papers on starches (from different biological origins), unless the results provide some new insights of more general scientific interest or unusually specific application potential.

### EDITORS

**Professor J. F. KENNEDY**  
Chembiochem Laboratories,  
Kyrewood House,  
Tenbury Wells,  
Worcester, WR15 8SG, UK

**Professor J. R. MITCHELL**  
School of Biological Sciences,  
Division of Food Sciences,  
University of Nottingham,  
Sutton Bonington Campus,  
Loughborough LE12 5RD, UK

### ASSOCIATE EDITORS

**Professor M.A. COIMBRA**  
University of Aveiro, Portugal

**Professor K.J. EDGAR**  
Virginia Tech, Blacksburg, VA, USA

**Professor R.A.A. MUZZARELLI**  
Università Politecnica delle Marche,  
Ancona, Italy

**Professor B.S. PAULSEN**  
University of Oslo, Blindern, Norway

**Professor R.C. SUN**  
Beijing Forestry University, Beijing, China

### EDITORIAL BOARD

**J.N. BeMiller**  
Purdue University, West Lafayette, Indiana, USA

**E. Bertoff**  
University of Minnesota, St. Paul, Minnesota, USA

**T. Budtova**  
MINES ParisTech, Sophia Antipolis, France

**H.N. Cheng**  
U.S. Department of Agriculture (USDA), New Orleans, Louisiana, USA

**B.E. Christensen**  
Norwegian University of Science & Technology, Trondheim, Norway

**M. Collins**  
University of Limerick, Limerick, Ireland

**C. De Castro**  
University of Napoli, Napoli, Italy

**H.B. Deng**  
Wuhan University, Wuhan, Hubei, China

**K. Desai**  
Kimberly-Clark Corporation

**Y. Du**  
Wuhan University, Wuhan, Hubei, China

**A. Dufresne**  
Grenoble Institute of Technology, Saint Martin d'Hères, France

**D.E. Dunstan**  
University of Melbourne, Parkville, Australia

**Y. Fang**  
Shaanxi Normal University, Xi'an, China

**P. Fardim**  
Åbo Akademi University, Turku, Finland

**H.P. Fink**  
Fraunhofer Institute for Applied Polymer Research, Potsdam, Germany

**M. Gidley**  
University of Queensland, St Lucia, Queensland, Australia

**R.G. Gilbert**  
University of Queensland, Brisbane, Queensland, Australia

**P.A.J. Gorin**  
Universidade Federal do Paraná, Curitiba, Parana, Brazil

**J. Hasjim**  
Roquette, Shanghai, China

**T. Heinze**  
Friedrich Schiller University of Jena, Jena, Germany

**A. Isogai**  
University of Tokyo, Bunkyo-Ku, Japan

**S. Janaswamy**  
Purdue University, West Lafayette, Indiana, USA

**J. Jane**  
Iowa State University, Ames, Iowa, USA

**H. Kamitakahara**  
Kyoto University, Kyoto, Japan

**R.J. Linhardt**  
Rensselaer Polytechnic Institute, Troy, New York, USA

**H. Liu**  
China University of Geosciences, Wuhan, China

**P. Lu**  
Georgia Tech and Emory University, Atlanta, Georgia, USA

**S.J. McCarthy**  
HemCon Medical Technologies Inc, Portland, Oregon, USA

**P. Methacanon**  
Ministry of Science and Technology (Thailand), Pathumthani, Thailand

**E.R. Morris**  
University College Cork, Cork, Ireland

**V.J. Morris**  
Institute of Food Research, Norwich, UK

**P. Navard**  
Ecole des Mines de Paris & CNRS, Sophia Antipolis cedex, France

**P. Prasertsan**  
Prince of Songkla University, Hatyai, Thailand

**H.A. Schols**  
Wageningen Universiteit, Wageningen, Netherlands

**P. Seib**  
Kansas State University, Manhattan, Kansas, USA

**I. Sims**  
Victoria University of Wellington, Petone, New Zealand

**M. Skotak**  
New Jersey Institute of Technology, Newark, New Jersey, USA

**A.J. Varna**  
National Chemical Laboratory, Pune, India

**J. Vercellotti**  
V-Labs Inc., Covington, Louisiana, USA

**Q. Wang**  
Agriculture and Agri-Food Canada (AAFC), Guelph, Ontario, Canada

**P.A. Williams**  
Glyndwr University, Wrexham, UK

**Publication Information:** *Carbohydrate Polymers* (ISSN 0144-8617). For 2014, volumes 102–117 are scheduled for publication. Subscription prices are available upon request from the Publisher or from the Elsevier Customer Service Department nearest you or from this journal's website (<http://www.elsevier.com/locate/carbpol>). Further information is available on this journal and other Elsevier products through Elsevier's website (<http://www.elsevier.com>). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

For a full and complete Guide for Authors, please go to: <http://www.elsevier.com/locate/carbpol>