



CARBOHYDRATE RESEARCH

An International Journal of Molecular Glycoscience

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

●	Description	p.1
●	Audience	p.1
●	Impact Factor	p.1
●	Abstracting and Indexing	p.2
●	Editorial Board	p.2
●	Guide for Authors	p.4



ISSN: 0008-6215

DESCRIPTION

Carbohydrate Research publishes outstanding and timely research reports on **molecular aspects of carbohydrate chemistry, biochemistry, chemical biology and glycobiology.**

Areas of interest include:

- Sugars, glycosides and their derivatives; oligo- and poly-saccharides; glycoconjugates
- Chemical and enzymatic synthesis of carbohydrate-containing molecules.
- Isolation and structural characterization of novel carbohydrate-containing molecules
- Experimental and theoretical studies on structure, dynamics and mechanism
- Analytical chemistry and biochemistry, including molecular probes
- Studies of carbohydrate-processing, including enzyme action, mechanism and inhibition
- Glycobiology, glycan metabolism and biosynthesis
- Glycomics and glycoinformatics
- Molecular aspects of glycoimmunochemistry
- Molecular aspects of glyconanoparticles and carbohydrate materials

The journal includes full-length research papers, reviews and notes, all of which are subjected to rigorous peer review prior to acceptance.

The editors have compiled a selection of articles, which reflect the redefined scope of Carbohydrate Research - we invite you to view the selection [here](#) and download the articles for free for a limited time.

AUDIENCE

Chemists, Biologists, Biochemists and Medical Researchers/Scientists involved in studies of molecular aspects of glycoscience.

IMPACT FACTOR

2016: 2.096 © Thomson Reuters Journal Citation Reports 2017

ABSTRACTING AND INDEXING

AGRICOLA
BIOSIS
Reaxys
Chemical Abstracts
Current Contents/Physics, Chemical, & Earth Sciences
MEDLINE®
EI Compendex Plus
EMBASE
Science Citation Index
Current Awareness in Biological Sciences
Scopus

EDITORIAL BOARD

Editor-in-Chief

R. A. Field, Dept. of Biological Chemistry, John Innes Centre, Norwich Research Park, NR4 7UH, Norwich, UK

Associate Editors

X. Chen, University of California, Davis, Davis, California, USA

K. Ding, Chinese Academy of Sciences (CAS), Shanghai, China

Y.A. Knirel, Russian Academy of Sciences, Moscow, Russian Federation

Editorial Board

J. Barchi Jr., Frederick, Maryland, USA

G.S. Besra, Birmingham, UK

G-J. Boons, Athens, Georgia, USA

H. Cao, Jinan, Shandong, China

I. Carvalho, Ribeirão Preto, Brazil

P. Cescutti, Trieste, Italy

B.E. Christensen, Trondheim, Norway

D. Crich, Detroit, Michigan, USA

C. De Castro, Napoli, Italy

C. de Meo, Edwardsville, , Illinois, USA

A.V. Demchenko, Saint Louis, USA

I. Donati, Trieste, Italy

J. Duus, Lyngby, Denmark

A. Fairbanks, Christchurch, New Zealand

A.D. French, New Orleans, Louisiana, USA

M.C. Galan, Bristol, UK

C. Gallo-Rodriguez, Buenos Aires, Argentina

J.M. Garcia Fernandez, Sevilla, Spain

O. Holst, Borstel, Germany

X. Huang, East Lansing, Michigan, USA

S.-C. Hung, Taipei City, Taiwan, ROC

A. Imberty, Grenoble cedex 09, France

Y. Ito, Wako-Shi, Japan

N. Jayaraman, Bangalore, India

J. Jimenez-Barbero, Madrid, Spain

C. Jones, St Albans, Herts, UK

J.P. Kamerling, Utrecht, Netherlands

R. Kartha, SAS Nagar, Punjab, India

S. Kitamura, Osaka, Japan

T. Kwok-Kong Mong, Hsinchu, Taiwan

A. Laws, Huddersfield, England, UK

T. Lindhorst, Kiel, Germany

M. Manley-Harris, Hamilton, New Zealand

M.A. Monteiro, Guelph, Canada

L. Mulard, Paris Cedex 15, France

K. Naidoo, Cape Town, South Africa

M. Nitz, Toronto, Ontario, Canada

T. Nokami, Tottori, Japan

H.S. Overkleeft, Leiden, Netherlands

M. Sollogoub, Paris, France
L. Somsák, Debrecen, Hungary
B. Stocker, Wellington, New Zealand
C.A. Stortz, Buenos Aires, Argentina
S Vidal, Villeurbanne, France
L.-X. Wang, Baltimore, Maryland, USA
D.M. Whitfield, Ottawa, Ontario, Canada
S.J. Williams, Melbourne, Victoria, Australia
X.-S. Ye, Beijing, China
B. Yu, Shanghai, China

GUIDE FOR AUTHORS

INTRODUCTION

Carbohydrate Research publishes reports of original research in the following areas of carbohydrate science: action of enzymes, analytical chemistry, biochemistry (biosynthesis, degradation, structural and functional biochemistry, conformation, molecular recognition, enzyme mechanisms, carbohydrate-processing enzymes, including glycosidases and glycosyltransferases), chemical synthesis, isolation of natural products, physicochemical studies, reactions and their mechanisms, the study of structures and stereochemistry, and technological aspects.

Papers on polysaccharides should have a "molecular" component; that is a paper on new or modified polysaccharides should include structural information and characterization in addition to the usual studies of rheological properties and the like. A paper on a new, naturally occurring polysaccharide should include structural information, defining monosaccharide components and linkage sequence.

Papers devoted wholly or partly to X-ray crystallographic studies, or to computational aspects (molecular mechanics or molecular orbital calculations, simulations via molecular dynamics), will be considered if they meet certain criteria. For computational papers the requirements are that the methods used be specified in sufficient detail to permit replication of the results, and that the conclusions be shown to have relevance to experimental observations – the authors' own data or data from the literature. Specific directions for the presentation of X-ray data are given below under Results and "discussion".

Types of paper

Contributions to *Carbohydrate Research* may be in the form of the following article types:

Full Papers - these should be substantial completed pieces of original research that are of significance and which, in addition, are presented clearly and concisely.

Notes - these are concise but complete descriptions of an investigation of a limited scope that will not be included in a later paper.

Mini-Reviews - these are critical reports reviewing important research in that field. While manuscripts usually are submitted at the invitation of Editors, contributions can be made by interested individuals if they contact an Editor to ensure that a suggested topic is both suitable and not already in process. Mini-reviews are often solicited for a Special Issue on a particular topic.

Link to full guide for authors

Some of the notes shown here are a shortened version of the guide for authors. The full instructions to authors, including all special characters are available for download as a pdf file. [pdf link](#)

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address

All necessary files have been uploaded:

Manuscript:

- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations

- Manuscript has been 'spell checked' and 'grammar checked'
- All references mentioned in the Reference List are cited in the text, and vice versa

- Permission has been obtained for use of copyrighted material from other sources (including the Internet)
- Relevant declarations of interest have been made
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our [Support Center](#).

BEFORE YOU BEGIN

Ethics in publishing

Please see our information pages on [Ethics in publishing](#) and [Ethical guidelines for journal publication](#).

Declaration of interest

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. If there are no conflicts of interest then please state this: 'Conflicts of interest: none'. [More information](#).

Submission declaration and verification

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see '[Multiple, redundant or concurrent publication](#)' section of our ethics policy for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service [CrossCheck](#).

Changes to authorship

Authors are expected to consider carefully the list and order of authors **before** submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only **before** the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the **corresponding author**: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors **after** the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Article transfer service

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. [More information](#).

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see [more information](#) on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. [Permission](#) of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has [preprinted forms](#) for use by authors in these cases.

For open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' ([more information](#)). Permitted third party reuse of open access articles is determined by the author's choice of [user license](#).

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. [More information](#).

Elsevier supports responsible sharing

Find out how you can [share your research](#) published in Elsevier journals.

Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Funding body agreements and policies

Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the Open Access Publication Fee. Details of [existing agreements](#) are available online.

Open access

This journal offers authors a choice in publishing their research:

Open access

- Articles are freely available to both subscribers and the wider public with permitted reuse.
- An open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Subscription

- Articles are made available to subscribers as well as developing countries and patient groups through our [universal access programs](#).
- No open access publication fee payable by authors.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For open access articles, permitted third party (re)use is defined by the following [Creative Commons user licenses](#):

Creative Commons Attribution (CC BY)

Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The open access publication fee for this journal is **USD 3300**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

Green open access

Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our [green open access page](#) for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription

articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. [Find out more](#).

This journal has an embargo period of 24 months.

Elsevier Publishing Campus

The Elsevier Publishing Campus (www.publishingcampus.com) is an online platform offering free lectures, interactive training and professional advice to support you in publishing your research. The College of Skills training offers modules on how to prepare, write and structure your article and explains how editors will look at your paper when it is submitted for publication. Use these resources, and more, to ensure that your submission will be the best that you can make it.

Language (usage and editing services)

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the [English Language Editing service](#) available from Elsevier's WebShop.

Submission

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Submit your article

Please submit your article via <https://www.elsevier.com/locate/jrnl/CAR>

Referees

Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our [Support site](#). Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

PREPARATION

Peer review

This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. [More information on types of peer review](#).

Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the [Guide to Publishing with Elsevier](#)). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Article structure

Subdivision - numbered sections

The body of the *text* (including tables, charts, and figures, and a bibliography). Typically the body comprises sections labelled Introduction, Results and discussion, and Experimental, but this specific structure is not obligatory. Authors are free to vary the organization of articles as needed for optimal presentation of their subject matter.

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to "the text". Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

Graphical abstract

A graphical abstract is mandatory for this journal. It should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership online. Authors must provide images that clearly represent the work described in the article. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view [Example Graphical Abstracts](#) on our information site.

Authors can make use of Elsevier's [Illustration Services](#) to ensure the best presentation of their images also in accordance with all technical requirements.

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view [example Highlights](#) on our information site.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Chemical compounds

You can enrich your article by providing a list of chemical compounds studied in the article. The list of compounds will be used to extract relevant information from the NCBI PubChem Compound database and display it next to the online version of the article on ScienceDirect. You can include up to 10 names of chemical compounds in the article. For each compound, please provide the [PubChem CID](#) of the most relevant record as in the following example: Glutamic acid (PubChem CID:611). Please position the list of compounds immediately below the 'Keywords' section. It is strongly recommended to follow the exact text formatting as in the example below:

Chemical compounds studied in this article

Ethylene glycol (PubChem CID: 174); Plitidepsin (PubChem CID: 44152164); Benzalkonium chloride (PubChem CID: 15865)

[More information.](#)

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources

List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Nomenclature and units

Chemical and Biochemical Nomenclature

The nomenclature of all carbohydrates and glycoconjugates should follow the recommendations of the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature: "Nomenclature of Carbohydrates (Recommendations 1996)" published in *Pure Appl. Chem.*, **1996**, 68, 1919-2008 as well as *Carbohydr. Res.* **1997**, 297, 1-92 and elsewhere, including the World-Wide Web at <http://www.chem.qmul.ac.uk/iupac/2carb/>.

For visual representation of glycan structures, authors are strongly recommended using the Symbol Nomenclature for Glycans (SNFG) that can be found at <https://www.ncbi.nlm.nih.gov/books/NBK310273/>. All figures depicting glycans with symbols for monosaccharides are required to follow the shapes and colors presented in the current version of the SNFG. Please cite *Glycobiology* 25: 13231324, 2015. doi: 10.1093/glycob/cwv091 <https://www.ncbi.nlm.nih.gov/pubmed/26543186>.

Symbol Nomenclature for Glycans

For presentation of glycan structures, authors are strongly recommended using the Symbol Nomenclature for Glycans (SNFG) that can be found at <https://www.ncbi.nlm.nih.gov/books/NBK310273/>. All figures depicting glycans with symbols for monosaccharides are required to follow the shapes and colors presented in the current version of the SNFG. Please cite *Glycobiology* 25: 13231324, 2015. doi: 10.1093/glycob/cwv091 (PMID 26543186).

Title Compounds

3.1.1. Methyl 6-O-tert-butyldimethylsilyl- β -D-allopyranoside (4).

Note that the (numbered) compound is an example of a *title compound*, which should satisfy certain criteria if it is to be listed this way. Convincing evidence for identity and purity must be presented for all new carbohydrate derivatives listed as *title compounds*. Ordinarily, identity is established by NMR and mass spectral data. As evidence of purity authors are required to include an elemental (combustion) analysis (minimally C and H), with values deviating from the theoretical not more than 0.4% absolute. When a C and H analysis is not feasible (e.g., very small amounts of material available), the

criteria used to assess purity should be specified; these should include NMR observations (absence of extraneous lines in a spectrum run at high sensitivity) and chromatographic data (GLC, HPLC, or TLC at high sensitivity). Also desirable are m/z values from mass spectra.

It is not expected that all the intermediates in a synthetic sequence will be purified to the point of giving satisfactory elemental analyses. Many compounds will be used in a subsequent step without being refined to ultimate purity. However, the description of the preparation of such compounds should be consolidated with the description of the next title compound in the series.

Nomenclature

Listing of Physical Data. The preferred order is: mp (if applicable); $[\alpha]_D$ (normally required for chiral compounds); R_f values (if pertinent); electronic-spectral data (UV, IR, if recorded); NMR data (if not presented in a table); MS. Note the use of semicolons to separate the successive items, and the use of ACS-approved abbreviations (see *ACS Style Guide*). Punctuate as in the following example:

...gave needles: mp 8385 C; $[\alpha]_{D25}$ 110 (c 1.4, CHCl₃); IR (KBr); ν 1730 and 1260 (ester), 860 and 840 (Me 3 Si), and 710 cm⁻¹ (Ph); 1 H NMR (CDCl₃, 600 MHz): δ ...

If there are published physical constants (mp, $[\alpha]_D$, λ max, etc.) for the compound these should be cited, using the following format:

...allyl 2-acetamido-2-deoxy- β -D-glucopyranoside (1a): mp 175176 C, lit. 6 172174 C; $[\alpha]_D$ 25 +155 (c 1.43, water), lit. 6 +149; 1 H NMR...

NMR data. NMR data may be presented in either tables or in the text. Tables are preferred for complex NMR assignments and for series of compounds with full assignments. Full assignments are encouraged using 2D NMR techniques, especially for large, complex structures. For listings as running text please adhere strictly to a uniform style. The following is the preferred format:

1 H NMR (CDCl₃): δ 7.35 (d, 1H, J_{3,4} 2.0 Hz, H-3), 5.10 (dd, 1H, J_{4,5} 4.0 Hz, H-4), 4.40 (ddd, 1H, J_{5,6a} 6.5, J_{5,6b} 5.5 Hz, H-5),...

Additional conventions used in describing higher order data include, for example, the designation of peaks in COSY spectra: Man H-1,2; HOHAHA tracking: GlcNAc H-2,3,4,5,6a,6b etc.; NOE contacts: Glc H-1, Xyl H-4,5e, etc. For designating resonances in oligosaccharides, the sugar units should be numbered with Roman numerals I, II, III, etc. beginning at the reducing(upstream) end of the molecule. (See IUPAC Nomenclature for Carbohydrates, 2-CARB-37.2.)The individual resonances are numbered with Roman numeral superscripts as, for example, the following: H-3 I, H-3 II, H-3 III.

1H (signals and coupling constants assigned) and 13C NMR data are required for all synthetic compounds and must be included as electronic supporting information. A minimum of three pieces of analytical data are required for all known compounds, while five pieces of data are required for all new compounds. The latter must include either C and H analysis or high resolution mass spectrometry data.

Elemental analysis data. Elemental analysis results follow the last spectral data, in the same paragraph. Use the following format: "Anal. Calcd for C₁₃H₁₇BrO₈S: C, 37.78; H, 4.15; Br, 19.34; S, 7.76. Found: C, 37.86; H, 4.13; Br, 19.45; S, 7.84". Note the arrangement of element symbols in the molecular formula: C, H, then the remaining symbols (including metals in salts and complexes) in alphabetical order (standard Hill system).

Elemental analysis data

X-ray crystallographic data. Before submission of the paper, the X-ray data must be filed with and accepted by the Cambridge Crystallographic Data Centre in the usual CIF (Crystallographic Information File) file format. Under a section, "Supplementary Data," that is placed just after the Experimental section, a statement is made as follows:

"Complete crystallographic data for the structural analysis have been deposited with the Cambridge Crystallographic Data Centre, CCDC no. 000000. Copies of this information may be obtained free of charge from the Director, Cambridge Crystallographic Data Centre, 12 Union Road, Cambridge, CB2 1EZ, UK. (fax: +44-1223-336033, e-mail: deposit@ccdc.cam.ac.uk or via: www.ccdc.cam.ac.uk)."

A subheading in the Experimental section is devoted to the description of the X-ray experiment, the equipment, and other information required for repetition of the experiment. Preferably in a table (alternatively in a paragraph of text) crystal data, particulars of the diffraction analysis, and refinement data (specify the function minimized in the least-squares refinement and the weighting factor used), are presented. A table of atomic coordinates and their related anisotropic thermal parameters, tabulations of torsion angles and hydrogen-bond parameters if appropriate, and a structural drawing showing the nonhydrogen atoms as thermal ellipsoids, prepared with ORTEP or an equivalent program should be provided. Only bond angles and bond lengths that are remarkable or necessary for the Discussion section should be provided in a table. A statement giving the ranges of values observed will suffice, with a comment on any unusual values (i.e., outliers). Sufficient torsion angles should be reported to define the molecular conformation. For ring systems, Cremer-Pople puckering parameters (Cremer, D.; Pople, J. A. J. Am. Chem. Soc. 1975, 97, 1354-1358) or their equivalent should be reported. If hydrogen atoms are included in the final refinement, their coordinates should be included in an appropriate table. If there is any discussion of hydrogen bonding, a statement describing precisely how the hydrogen positions were obtained is necessary, and isotropic temperature factors should be included with the H-atom coordinates. Complete tables of bond lengths, valence angles and torsion angles should be provided in the Supplementary Data section of the paper as submitted to the CCDC. Tables of observed and calculated structure factors are not needed as supplementary data. Care must be taken to have the crystallographer correctly number the atoms in the molecular structure according to IUPAC rules of nomenclature. This numbering should appear for atoms listed in the tables and in the ORTEP or other structural figure(s). It is recommended that the system C-1, C-2, O-1, etc. be used.

For cases where X-ray crystallography is used to support the structural identification of a synthetic or natural product in a paper devoted largely to synthetic or isolation chemistry, the authors may wish to report only the ORTEP or similar depiction of the molecule(s). At a minimum, a description of the experimental methods and a tabulation of crystal data should be provided as Supplementary Data to appear with the electronic version of the paper (in addition to filing the data with CCDC, above.)

Papers on X-ray crystallography may appear either as Notes or Full Papers, the former most often used to essentially report the structure of a single or limited number of carbohydrate compounds.

Artwork

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

A detailed [guide on electronic artwork](#) is available.

You are urged to visit this site; some excerpts from the detailed information are given here.

Formats

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings, embed all used fonts.

TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.

TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.

TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Tables and Figures

These should be so constructed as to be intelligible without reference to the text. Every table should have a heading, as should every column in a table. Every figure should have a caption (which should be provided on a separate page from the figure). Where the figure is a graph, all axes should be labelled and provided with a scale if appropriate. All graphics must be labelled with the figure or scheme number and the corresponding author's name with a clear file name if using online submission.

Charts and drawings produced by computer must be prepared at a resolution of 300 dpi or better. All graphics (including chemical structures) must be supplied as computer files, for reproduction at single or double column width (83 mm or 176 mm, respectively). Authors should take particular care to ensure that lettering on a figure will remain legible after reduction. Proper format for those using ChemDraw is set by using "File, Apply Document, Settings from, ACS Document 1996".

Note 1: ChemDraw/IsisDraw files need to be embedded in the manuscript text and uploaded as separate ChemDraw/IsisDraw files as part of your submission. All other figures, graphics and photos may be embedded in the manuscript text file. Please upload separate figure files; preferred formats are EPS, TIFF, JPEG.

Note 2: If a figure or table is uploaded as a separate file, then please exclude this from the manuscript text file, otherwise it will be shown in the PDF twice.

Note 3: For each figure and table please include the appropriate figure/table number in the description field. This helps the Editor to identify the figure/table in the PDF.

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. This identifier will not appear in your published article.

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1, 2015. <http://dx.doi.org/10.17632/xwj98nb39r.1>.

Reference style

Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.

Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result'

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, J. Sci. Commun. 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

Reference to a dataset:

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

Journal abbreviations source

Journal names should be abbreviated according to the [List of Title Word Abbreviations](#).

Video

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including [ScienceDirect](#). Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our [video instruction pages](#). Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Supplementary material

Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

RESEARCH DATA

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the [research data](#) page.

Data linking

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that give them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the [database linking page](#).

For [supported data repositories](#) a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley data

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to *Mendeley Data*. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the [Mendeley Data for journals page](#).

Transparency

To foster transparency, we encourage you to state the availability of your data in your submission. If your data is unavailable to access or unsuitable to post, this gives you the opportunity to indicate why. If you submit [this form](#) with your manuscript as a supplementary file, the statement will appear next to your published article on ScienceDirect.

ARTICLE ENRICHMENTS

AudioSlides

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. [More information and examples are available](#). Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Chemical Compound Viewer (Reaxys)

You can enrich your article with visual representations, links and details for those chemical structures that you define as the main chemical compounds described. Please [follow the instructions](#) to learn how to do this.

Interactive plots

This journal enables you to show an Interactive Plot with your article by simply submitting a data file. [Full instructions](#).

Additional information

A *title* - this should be concise, but specific enough to alert the readers to whom the article is directed when seen in a table of contents, database, etc.

A listing of the *author(s)* with the *address(es)* of their institutions - please provide one fully spelled-out given name (forename) for each author (s). The corresponding author(s) should always be indicated by an asterisk.

Formula charts and Schemes

Particular attention should be paid to current conventions for drawing sugar ring structures (tapered thickening of forward edges, etc.). Structural formulas should be grouped for insertion in the text at appropriate points. Such groups need not have a caption, but those showing reaction sequences (i.e., containing arrows) may be designated Scheme 1, Scheme 2, etc. In charts and schemes formula numbers must follow in sequence across the page, except where a single structure with R groups represents two or more compounds. The sequence then follows the listing below the structure, which should be in "tabular" format.

AFTER ACCEPTANCE

Online proof correction

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints

The corresponding author will, at no cost, receive a customized [Share Link](#) providing 50 days free access to the final published version of the article on [ScienceDirect](#). The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's [Webshop](#). Corresponding authors who have published their article open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

AUTHOR INQUIRIES

Visit the [Elsevier Support Center](#) to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch.

You can also [check the status of your submitted article](#) or find out [when your accepted article will be published](#).

© Copyright 2014 Elsevier | <http://www.elsevier.com>