

Editorial Board

Chair

D. Carling • London

Vice Chair, The Americas

G. Salvesen • La Jolla, CA

Vice Chair, Asia-Pacific

T. Xu • Beijing

Vice Chair, Europe

D. R. Alessi • Dundee

Reviews Editor

G. Salvesen • La Jolla, CA

Deputy Chairs

J. F. Cáceres • Edinburgh**A. C. Clark** • Raleigh, NC**S. Huber** • Urbana, IL**M. A. Lemmon** • Philadelphia, PA**C. MacKintosh** • Dundee**M. Murphy** • Cambridge**K. Rittinger** • London**S. Roberts** • Bristol**M. A. Schwartz** • New Haven, CT**G. R. Steinberg** • Hamilton, ON**D. Tosh** • Bath**M. Uesugi** • Kyoto**D. M. F. van Aalten** • Dundee**B. Vanhaesebroeck** • London**H. M. Wallace** • Aberdeen**M. F. White** • St Andrews**A. Xu** • Hong Kong**C. Zurzolo** • Paris

Publisher

M. Legge

Executive Editor

C. L. Curtis

Publishing Operations Manager

M. D. Cunningham

Production Editor

R. B. Etherington

Administrative Editor, US Office

S. Schendel

Administrative Editor, China Office

L. Huo

J. C. Adams (Bristol)

H. A. Armelin (São Paulo)

S. M. Assmann (University Park, PA)

J. M. Backer (Bronx, NY)

B. M. Baker (Notre Dame, IN)

J. E. Bear (Chapel Hill, NC)

J. L. Blank (Cambridge, MA)

M. A. Bogoyevitch (Melbourne)

L. H. Boise (Atlanta, GA)

J. Bolaños (Salamanca)

A. Bowie (Dublin)

S. Bray (Cambridge)

S. Bröer (Canberra)

P. S. Brookes (Rochester, NY)

D. Burger (Geneva)

R. A. Casero, Jr (Baltimore, MD)

L. Chernomordik (Bethesda, MD)

J. Cui (St Louis, MO)

V. L. Davidson (Orlando, FL)

M. J. Davies (Sydney)

B. Davis (Oxford)

C. L. Day (Dunedin)

L. A. Devi (New York, NY)

C. Dickey (Tampa, FL)

I. Dikic (Frankfurt)

J. Endicott (Newcastle upon Tyne)

S. Flitsch (Manchester)

F. Foufelle (Paris)

C. Frezza (Cambridge)

M. Hampton (Otago)

A. D. Hanson (Gainesville, FL)

J. A. Hardy (Amherst, MA)

P. Hawkins (Cambridge)

P. Hedden (Harpden)

N. Hogg (Milwaukee, WI)

J. M. Horowitz (Raleigh, NC)

E. Ikonen (Helsinki)

A. Imberty (Grenoble)

D. A. Jans (Monash)

J. Jez (St Louis, MO)

P. Kemp (Cardiff)

S. Kim (Seoul)

K. Kirk (Canberra)

Z. Knight (San Francisco, CA)

D. W. Laird (London, ON)

S. P. Lees-Miller (Calgary, AB)

J. Leiper (London)

S. Ley (London)

M. Lowe (Manchester)

K. Lynch (Philadelphia, PA)

N. Q. McDonald (London)

M. McManus (Palmerston North)

G. Melino (Leicester)

T. Miller (Norwich)

G. B. Moorhead (Calgary)

E. T. Morgan (Atlanta, GA)

S. J. Morley (Brighton)

M. Muckenthaler (Heidelberg)

J. M. Murphy (Parkville)

J. H. Naismith (St Andrews)

A. R. Nebreda (Barcelona)

W. Ogawa (Kobe)

M. Okada (Osaka)

K. Okkenhaug (Cambridge)

R. Parton (Queensland)

B. Payrastre (Toulouse)

D. Pei (Columbus, OH)

P. F. Pilch (Boston, MA)

W. C. Plaxton (Kingston, ON)

S. Ponnambalam (Leeds)

R. Y. Poon (Hong Kong)

B. V. L. Potter (Bath)

C. G. Proud (Southampton)

A. Quest (Chile)

M. F. Roberts (Boston, MA)

B. S. Rothberg (Philadelphia, PA)

P. Saftig (Kiel)

K. Sakamoto (Lausanne)

J. M. Sanchez-Ruiz (Granada)

F. Sargent (Dundee)

K. Schumacher (Heidelberg)

P. T. Schumacker (Chicago, IL)

L. C. Serpell (Brighton)

S. M. Serrano (São Paulo)

R. J. Shaw (La Jolla, CA)

H. Shimano (Tsukuba City)

J. Slack (Minneapolis, MN)

S. Spiegel (Richmond, VA)

A. Srebrow (Buenos Aires)

W. M. Stark (Glasgow)

S. Teichmann (Cambridge)

V. Tergaonkar (Singapore)

K. Tokatlidic (Glasgow)

C. N. Tomes (Mendoza)

C. Tournier (Manchester)

H. D. Ulrich (Mainz)

S. Urbé (Liverpool)

M.-W. Wang (Shanghai)

M. J. West (Brighton)

S. Whitney (Canberra)

D. Wu (Guangzhou)

I. Zachary (London)



- Journal compilation © 2015 Biochemical Society
- The *Biochemical Journal* (ISSN 0264-6021 for print/online journal; ISSN 1470-8728 for online only journal) is published and distributed by Portland Press Limited on behalf of the Biochemical Society (the owner), and appears twice monthly (24 issues).
- **Editorial and publishing offices:** *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JU, U.K.
- **US agent:** c/o Air Business Ltd, c/o Worldnet Shipping Inc., 156–15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, U.S.A.
- **Subscriptions department:** Portland Customer Services, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JU, U.K.
- All rights reserved. Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted, in any forms or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of permissions granted by copyright clearing houses such as the Copyright Licensing Agency (U.K.) or the Copyright Clearance Center (U.S.A.). The CCC item-fee code for this publication is 0264-6021/2015/\$50.00 + 0.00. Inquiries concerning reproduction outside those terms should be sent to the publishers at the above-mentioned address.
- Although, at the time of going to press, the information contained in this publication is believed to be correct, neither the authors nor the editors nor the publisher assume any responsibility for any errors or omissions herein contained. Opinions expressed in articles are not necessarily those of the editors, the publisher or the owner.
- Periodicals postage paid at Jamaica, NY 11431
- **Postmaster:** send address corrections to *Biochemical Journal*, c/o Air Business Ltd, c/o Worldnet Shipping Inc., 156–15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, U.S.A.
- **Cover design:** Angie Moyes (www.fuz.co.uk).
- **Cover image credits:** M. Sharon Stack, University of Missouri; Carmen A. Mannella, Research and Technology Wadsworth Center, Albany, NY; Department of Microbiology, University of Leeds; Jan A. Miernyk, University of Missouri; G. P. Côté, Kingston, ON; G. Salvesen, La Jolla; Dr Gordon Beakes, Newcastle University.

● **General policy** The *Biochemical Journal* publishes papers in English in all fields of biochemistry and cellular and molecular biology, provided that they make a sufficient contribution to knowledge in these fields. Papers may include new results obtained experimentally, descriptions of new experimental methods of biochemical importance, or new interpretations of existing results. Novel theoretical contributions will be considered, although these papers should also contain some experimental testing of the theory. All work presented should have as its aim the development of biochemical concepts rather than the mere recording of facts. Preliminary, confirmatory or inconclusive work will not be published. The *Biochemical Journal* will not publish material that has been wholly or largely published elsewhere, even as a preliminary communication or in unrefereed symposium proceedings or on the World Wide Web (WWW); equally, fragmentation of research into the 'least publishable unit' is discouraged.

Submission of a paper implies that it has been approved by all the named authors, that all persons entitled to authorship have been so named, that it reports unpublished work that is not under consideration elsewhere, and that if the paper is accepted for publication the authors will transfer to the Biochemical Society the copyright in the paper, which will then not be published elsewhere in the same form, in any language, without the consent of the Society. Authors will be required to sign an undertaking to these effects.

Authors may suggest potential reviewers for their papers, but the journal is under no obligation to follow such suggestions. Authors may also specify the names of those they wish to be excluded from the review process, and such wishes are usually respected unless, in the opinion of the journal, such a request unreasonably excludes all the expertise available to it in that scientific area.

To allow the reviewers to assess possible overlap with previous work, all submitted papers must be accompanied by duplicate copies of the author's relevant published work, including that on the WWW, and of all related papers in press or under editorial consideration in this or other journals.

The following types of paper are included in the journal.

● **Research Papers** are the normal form of publication, and may be of any length that is justified by their content. However, because of pressure for space in the journal, no paper, whatever its scientific merits, will be accepted if it exceeds the minimum length required for precision in describing the experiments and clarity in interpreting them. As a guide, most Research Papers published in the *Biochemical Journal* are of between six and eight

printed pages. A concise well-written paper tends to be published more rapidly.

● **Accelerated Publications (APs)** are short (normally four printed pages) papers bringing particularly novel and significant findings to the attention of the research community. It is intended that a decision on acceptance or rejection will be made within 10 working days of receipt, and publication of accepted APs in an issue will follow within 2 months. APs receive full but accelerated reviewing. The criteria of 'novelty and significance' are strictly enforced, and papers may be rejected solely on the grounds of lack of novelty and significance. APs are not a path to accelerated publication of sound but non-urgent material. Authors must include in their letter of submission a brief statement of why they believe their AP merits accelerated treatment. Colour figures will be published free of charge in APs, provided the use of colour is deemed scientifically necessary by the reviewers.

● **Reviews** will usually be solicited, although unsolicited reviews will be considered for publication. Prospective writers of reviews should first consult the Reviews Editor, via the editorial office, and should enclose a short (one page) summary of the area they propose to cover.

● **Procedure for submission** These instructions do not replace the official *Biochemical Journal* Instructions to Authors (<http://www.biochemj.org>). Authors are encouraged to refer to these for overall guidelines on submitting a paper. Before preparing papers for the journal, authors should consult a current issue to make themselves familiar with the general format, such as the use of cross-headings, layout of tables and figures and citation of references. A full page of text in the *Biochemical Journal* contains approximately 1200 words; when calculating the printed length of papers, allowance must be made for the space occupied by tables and figures and the number of text words reduced accordingly.

The numerical system of references must be used. A reference to 'unpublished work' must be accompanied by the names of all persons concerned: a reference to a 'personal communication' must be supported by written permission for the quotation from the person or persons concerned; both of these types of citation are permitted in the text only, not in the list of references.

● **Submit manuscripts online** Authors should submit manuscripts electronically using the Online Submission and Review System available at <http://www.biochemj.org/submit/>

● **Immediate Publications** Manuscripts are published online in PDF format as soon as they are accepted, unless on submission the author requests that this not be done. Immediate Publications are listed in and accessible through PubMed.

● **Open access option – Opt2Pay** Choose to make your paper open access. For more information see www.biochemj.org.

● **Queries and correspondence** Authors in the Americas should address all queries and correspondence about their submission to: Dr Sharon Schendel, BJ USA, The Sanford-Burnham Institute for Medical Research, 10901 N. Torrey Pines Road, La Jolla, CA 92037, U.S.A. (telephone +1 858 795 5283; fax +1 858 795 5284; email editorial@biochemjusa.org). Authors in China should contact: Dr Lin Huo, Institute of Biophysics, Chinese Academy of Sciences, Room 5202, 15 Datun Road, Chaoyang District, Beijing 100101 (telephone +86 10 64888573; email editorial@biochemj.cn). Authors in the U.K., the rest of Europe, Japan and the rest of the world should contact: The Publisher, *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JU, U.K. (telephone +44 20 7685 2410; fax +44 20 7685 2469; email editorial@portlandpress.com).

● **Colour figures** Colour figures are published free of charge provided that the corresponding author on the published paper has been a Full or Early Career member of the Biochemical Society for at least 2 years and that the use of colour is deemed scientifically necessary by the reviewers. Otherwise the charge is £300 to cover all colour figures in the paper.

● **Multimedia adjuncts** The Biochemical Journal Online offers authors the opportunity to enhance their papers with multimedia adjuncts (e.g. time-lapse movies, three-dimensional structures, animated schemes). These will be submitted to peer review alongside the manuscript. To submit a paper with a multimedia adjunct, please attach the file when you submit your manuscript electronically. Preferred formats are QuickTime for time-lapse movies, PDB for structures and Flash for animated schemes. There is no extra charge associated with the publication of a multimedia adjunct online.

● **COPE** The *Biochemical Journal* is a member of the Committee on Publication Ethics and endorses its guidelines, which are available at <http://publicationethics.org.uk>

Other information

The *Biochemical Journal* is published and distributed by Portland Press Limited on behalf of the Biochemical Society. It is published twice monthly; in 2015 volumes 465–476 (three parts each) will appear. The subscription also includes an author and key-word index.

● **Abstracted by/indexed in:** BIOBASE, BIOSIS, CAB International, Chemical Abstracts Service, Current Contents, EMBASE, International Food Information Service, MEDLINE/Index Medicus, Proquest Information & Learning, PubMed and Science Citation Index.

● **Subscription rates** Institutional subscription rates for 2015 are shown below. Subscribers to the *Biochemical Journal* can subscribe additionally to *Biochemical Society Transactions* on a joint subscription at a reduced rate (see www.portlandpress.com for further details). Terms are cash with order (US\$ in N. America, £ sterling for rest of the world, or US\$ equivalent at current rate of exchange; subscribers in the EU may

pay in £ sterling or Euros), or against pro forma invoice. Orders should be sent to the address shown, to your usual agent or purchased online at www.portlandpress.com.

	N. America	Rest of world	Euro price
One year (8 vols)	US\$5590	£3140	€4710
Print and online	US\$4470	£2510	€3770
Online only	US\$246	£150	€183
Single issues (print only)			

Overseas rates include airfreight delivery. Airtpeeded delivery is available at an additional cost of £112.35/\$199/€168.

Value Added Tax (VAT) on online-only and 'combined' subscriptions is due on supplies to subscribers within the UK, and to non-registered subscribers elsewhere in the EU. If in the EU please state your VAT number otherwise VAT may be charged at the appropriate national rate.

● **Electronic back archive** This is freely available to all users with Internet access.

● **Microfiche and back issues** Volumes 102–408 of the *Biochemical Journal* are available on microfiche. Back issues are also available. Further details may be obtained from the address below.

● Subscription Department

Portland Customer Services
Third Floor, Charles Darwin House,
12 Roger Street, London WC1N 2JU, U.K.
(telephone 020 76852444; fax 020 76852468;
email sales@portland-services.com).

● **Advertising** Enquiries about advertising should be addressed to marketing@portlandpress.com.

● The paper and cover-boards used in this journal are sourced from sustainable, managed and renewed commercial forests, and are fully recyclable. The bleaching process used for the pulp is 100% ECF (elemental chlorine free).

Reviews

- Directed evolution of cytochrome P450 enzymes for biocatalysis: exploiting the catalytic versatility of enzymes with relaxed substrate specificity**
Published on the Internet 20 March 2015, doi:10.1042/BJ20141493
J.B.Y.H. Behrendorff, W. Huang and E.M.J. Gillam 1–15
- Glycosynthesis in a waterworld: new insight into the molecular basis of transglycosylation in retaining glycoside hydrolases**
Published on the Internet 20 March 2015, doi:10.1042/BJ20141412
B. Bissaro, P. Monsan, R. Fauré and M.J. O'Donohue 17–35
- ## Research Papers
- Factor Xa dimerization competes with prothrombinase complex formation on platelet-like membrane surfaces
Published as BJ Immediate Publication 8 January 2015, doi:10.1042/BJ20141177
T. Koklic, R. Chattopadhyay, R. Majumder and B.R. Lentz 37–46
- The Tribbles 2 (TRB2) pseudokinase binds to ATP and autophosphorylates in a metal-independent manner
Published as BJ Immediate Publication 12 January 2015, doi:10.1042/BJ20141441
F.P. Bailey, D.P. Byrne, K. Oruganty, C.E. Evers, C.J. Novotny, K.M. Shokat, N. Kannan and P.A. Evers 47–62
- The MAP kinase-interacting kinases regulate cell migration, vimentin expression and eIF4E/CYFIP1 binding
Published as BJ Immediate Publication 15 January 2015, doi:10.1042/BJ20141066
J.E. Beggs, S. Tian, G.G. Jones, J. Xie, V. Iadevaia, V. Jenei, G. Thomas and C.G. Proud 63–76
- An interplay between the p38 MAPK pathway and AUBPs regulates *c-fos* mRNA stability during mitogenic stimulation
Published as BJ Immediate Publication 14 January 2015, doi:10.1042/BJ20141100
M.S. Degese, T. Tanos, J. Naipauer, T. Gingerich, D. Chiappe, P. Echeverria, J. Lamarre, J.S. Gutkind and O.A. Coso 77–90
- A stable RNA G-quadruplex within the 5'-UTR of *Arabidopsis thaliana* *ATR* mRNA inhibits translation
Published on the Internet 20 March 2015, doi:10.1042/BJ20141063
C.K. Kwok, Y. Ding, S. Shahid, S.M. Assmann and P.C. Bevilacqua 91–102
- Structural basis of cofactor-mediated stabilization and substrate recognition of the α -tubulin acetyltransferase α TAT1
Published as BJ Immediate Publication 20 January 2015, doi:10.1042/BJ20141193
S. Yuzawa, S. Kamakura, J. Hayase and H. Sumimoto 103–113
- High glucose induces mitochondrial dysfunction independently of protein O-GlcNAcylation
Published as BJ Immediate Publication 27 January 2015, doi:10.1042/BJ20141018
S. Dassanayaka, R.D. Readnower, J.K. Salabei, B.W. Long, A.L. Aird, Y.-T. Zheng, S. Muthusamy, H.T. Facundo, B.G. Hill and S.P. Jones 115–126
- Role of the N-terminal transmembrane domain in the endo-lysosomal targeting and function of the human ABCB6 protein
Published as BJ Immediate Publication 28 January 2015, doi:10.1042/BJ20141085
K. Kiss, N. Kucsma, A. Brozik, G.E. Tusnady, P. Bergam, G. Van Niel and G. Szakacs 127–139
- Molecular effects of cancer-associated somatic mutations on the structural and target recognition properties of Keap1
Published as BJ Immediate Publication 13 January 2015, doi:10.1042/BJ20140761
H. Khan, R.C. Killoran, A. Brickenden, J. Fan, D. Yang and W.-Y. Choy 141–151

Contents

Dissecting structural and electronic effects in inducible nitric oxide synthase <i>Published as BJ Immediate Publication 22 January 2015, doi:10.1042/BJ20141319</i>	L. Hannibal, R.C. Page, M.M. Haque, K. Bolisetty, Z. Yu, S. Misra and D.J. Stuehr	153–165
Activation of AtMPK9 through autophosphorylation that makes it independent of the canonical MAPK cascades <i>Published as BJ Immediate Publication 3 February 2015, doi:10.1042/BJ20141176</i>	S.K. Nagy, Z. Darula, B.M. Kállai, L. Bögre, G. Bánhegyi, K.F. Medzihradzky, G.V. Horváth and T. Mészáros	167–175
Role of Cys ³⁶⁰² in the function and regulation of the cardiac ryanodine receptor <i>Published as BJ Immediate Publication 21 January 2015, doi:10.1042/BJ20141263</i>	T. Mi, Z. Xiao, W. Guo, Y. Tang, F. Hiess, J. Xiao, Y. Wang, J.Z. Zhang, L. Zhang, R. Wang, P.P. Jones and S.R.W. Chen	177–190
Corrections		
DUBs, the regulation of cell identity and disease	J. Heideker and I.E. Wertz	191
Identification of key binding site residues of MCT1 for AR-C155858 reveals the molecular basis of its isoform selectivity	B. Nancolas, R.B. Sessions and A.P. Halestrap	192

Editorial Board

Chair

D. Carling • London

Vice Chair, The Americas

G. Salvesen • La Jolla, CA

Vice Chair, Asia-Pacific

T. Xu • Beijing

Vice Chair, Europe

D. R. Alessi • Dundee

Reviews Editor

G. Salvesen • La Jolla, CA

Deputy Chairs

J. F. Cáceres • Edinburgh**A. C. Clark** • Raleigh, NC**S. Huber** • Urbana, IL**M. A. Lemmon** • Philadelphia, PA**C. MacKintosh** • Dundee**M. Murphy** • Cambridge**K. Rittinger** • London**S. Roberts** • Bristol**M. A. Schwartz** • New Haven, CT**G. R. Steinberg** • Hamilton, ON**D. Tosh** • Bath**M. Uesugi** • Kyoto**D. M. F. van Aalten** • Dundee**B. Vanhaesebroeck** • London**H. M. Wallace** • Aberdeen**M. F. White** • St Andrews**A. Xu** • Hong Kong**C. Zurzolo** • Paris

Publisher

M. Legge

Executive Editor

C. L. Curtis

Publishing Operations Manager

M. D. Cunningham

Production Editor

R. B. Etherington

Administrative Editor, US Office

S. Schendel

Administrative Editor, China Office

L. Huo

J. C. Adams (Bristol)

H. A. Armelin (São Paulo)

S. M. Assmann (University Park, PA)

J. M. Backer (Bronx, NY)

B. M. Baker (Notre Dame, IN)

J. E. Bear (Chapel Hill, NC)

J. L. Blank (Cambridge, MA)

M. A. Bogoyevitch (Melbourne)

L. H. Boise (Atlanta, GA)

J. Bolaños (Salamanca)

A. Bowie (Dublin)

S. Bray (Cambridge)

S. Bröer (Canberra)

P. S. Brookes (Rochester, NY)

D. Burger (Geneva)

R. A. Casero, Jr (Baltimore, MD)

L. Chernomordik (Bethesda, MD)

J. Cui (St Louis, MO)

V. L. Davidson (Orlando, FL)

M. J. Davies (Sydney)

B. Davis (Oxford)

C. L. Day (Dunedin)

L. A. Devi (New York, NY)

C. Dickey (Tampa, FL)

I. Dikic (Frankfurt)

J. Endicott (Newcastle upon Tyne)

S. Flitsch (Manchester)

F. Fougère (Paris)

C. Frezza (Cambridge)

M. Hampton (Otago)

A. D. Hanson (Gainesville, FL)

J. A. Hardy (Amherst, MA)

P. Hawkins (Cambridge)

P. Hedden (Harpenden)

N. Hogg (Milwaukee, WI)

J. M. Horowitz (Raleigh, NC)

E. Ikonen (Helsinki)

A. Imberty (Grenoble)

D. A. Jans (Monash)

J. Jez (St Louis, MO)

P. Kemp (Cardiff)

S. Kim (Seoul)

K. Kirk (Canberra)

Z. Knight (San Francisco, CA)

D. W. Laird (London, ON)

S. P. Lees-Miller (Calgary, AB)

J. Leiper (London)

S. Ley (London)

M. Lowe (Manchester)

K. Lynch (Philadelphia, PA)

N. Q. McDonald (London)

M. McManus (Palmerston North)

G. Melino (Leicester)

T. Miller (Norwich)

G. B. Moorhead (Calgary)

E. T. Morgan (Atlanta, GA)

S. J. Morley (Brighton)

M. Muckenthaler (Heidelberg)

J. M. Murphy (Parkville)

J. H. Naismith (St Andrews)

A. R. Nebreda (Barcelona)

W. Ogawa (Kobe)

M. Okada (Osaka)

K. Okkenhaug (Cambridge)

R. Parton (Queensland)

B. Payrastre (Toulouse)

D. Pei (Columbus, OH)

P. F. Pilch (Boston, MA)

W. C. Plaxton (Kingston, ON)

S. Ponnambalam (Leeds)

R. Y. Poon (Hong Kong)

B. V. L. Potter (Bath)

C. G. Proud (Southampton)

A. Quest (Chile)

M. F. Roberts (Boston, MA)

B. S. Rothberg (Philadelphia, PA)

P. Saftig (Kiel)

K. Sakamoto (Lausanne)

J. M. Sanchez-Ruiz (Granada)

F. Sargent (Dundee)

K. Schumacher (Heidelberg)

P. T. Schumacker (Chicago, IL)

L. C. Serpell (Brighton)

S. M. Serrano (São Paulo)

R. J. Shaw (La Jolla, CA)

H. Shimano (Tsukuba City)

J. Slack (Minneapolis, MN)

S. Spiegel (Richmond, VA)

A. Srebrow (Buenos Aires)

W. M. Stark (Glasgow)

S. Teichmann (Cambridge)

V. Tergaonkar (Singapore)

K. Tokatlidis (Glasgow)

C. N. Tomes (Mendoza)

C. Tournier (Manchester)

H. D. Ulrich (Mainz)

S. Urbé (Liverpool)

M.-W. Wang (Shanghai)

M. J. West (Brighton)

S. Whitney (Canberra)

D. Wu (Guangzhou)

I. Zachary (London)

PORTLAND PRESS Ltd

Third Floor, Charles Darwin House
12 Roger Street
London WC1N 2JU, U.K.



ISSN 0264-6021

Index of Authors

	PAGE		PAGE		PAGE		PAGE
Aird, A. L.	115	Facundo, H. T.	115	Kiss, K.	127	Salabei, J. K.	115
Assmann, S. M.	91	Fan, J.	141	Koklic, T.	37	Sessions, R.B.	192
		Fauré, R.	17	Kucsma, N.	127	Shahid, S.	91
Bailey, F. P.	47			Kwok, C. K.	91	Shokat, K. M.	47
Bánhegyi, G.	167	Gillam, E. M. J.	1			Stuehr, D. J.	153
Beggs, J. E.	63	Gingerich, T.	77	LaMarre, J.	77	Sumimoto, H.	103
Behrendorff, J. B. Y. H.	1	Guo, W.	177	Lentz, B. R.	37	Szakacs, G.	127
Bergam, P.	127	Gutkind, J. S.	77	Long, B. W.	115		
Bevilacqua, P. C.	91					Tang, Y.	177
Bissaro, B.	17	Halestrap, A.P.	192	Majumder, R.	37	Tanos, T.	77
Bögre, L.	167	Hannibal, L.	153	Medzihradzky, K. F.	167	Thomas, G.	63
Bolisetty, K.	153	Haque, M. M.	153	Mészáros, T.	167	Tian, S.	63
Brickenden, A.	141	Hayase, J.	103	Mi, T.	177	Tusnady, G. E.	127
Brozik, A.	127	Heideker, J.	191	Misra, S.	153		
Byrne, D. P.	47	Hiess, F.	177	Monsan, P.	17	Van Niel, G.	127
		Hill, B. G.	115	Muthusamy, S.	115		
Chattopadhyay, R.	37	Horváth, G. V.	167			Wang, R.	177
Chen, S. R. W.	177	Huang, W.	1			Wang, Y.	177
Chiappe, D.	77			Nagy, S. K.	167	Wertz, I.E.	191
Choy, W.-Y.	141	ladevaia, V.	63	Naipauer, J.	77		
Coso, O. A.	77			Nancolas, B.	192	Xiao, J.	177
		Jenei, V.	63	Novotny, C. J.	47	Xiao, Z.	177
Darula, Z.	167	Jones, G. G.	63			Xie, J.	63
Dassanayaka, S.	115	Jones, P. P.	177	O'Donohue, M. J.	17		
Degese, M. S.	77	Jones, S. P.	115	Oruganty, K.	47	Yang, D.	141
Ding, Y.	91					Yu, Z.	153
		Kállai, B. M.	167	Page, R. C.	153	Yuzawa, S.	103
		Kamakura, S.	103	Proud, C. G.	63		
Echeverria, P.	77	Kannan, N.	47			Zhang, J. Z.	177
Eyers, C. E.	47	Khan, H.	141	Readnower, R. D.	115	Zhang, L.	177
Eyers, P. A.	47	Killoran, R. C.	141			Zheng, Y.-T.	115