JOURNAL OF METAMORPHIC GEOLOGY

Editors

Dr D. Robinson University of Bristol, U.K. Dr Michael Brown University of Maryland, U.S.A. Professor H.W. Day University of California, U.S.A. Professor R.H. Vernon Macquarie University, Australia

Launched in 1983, this journal brings together research on all aspects of metamorphic geology from a wide range of specialties and is designed to appeal to workers in the fields of metamorphic petrology, mineral deposits geology, geochemistry and other related fields in geology.

The scope of the journal extends over the whole range of metamorphic studies from the scale of the individual crystal to that of the lithospheric plate, including the properties of metamorphic minerals, the theoretical and experimental study of metamorphic reactions, the geochemistry of metamorphic rocks (including isotope geochemistry and fluid inclusion studies), microstructural studies of metamorphic rocks, deformation in relation to metamorphism, regional studies of metamorphic terrains (including geochemistry and geophysics), the environment of formation of metamorphic rocks, and economic aspects of metamorphic terrains (including the metamorphism of mineral deposits).

Subscription Information

Journal of Metamorphic Geology is published bi-monthly. Subscription rates for 1990 are £127.00 (UK), £146.00 (overseas) and US\$242.50 (USA & Canada) post free.

Please tick the appropriate box and return to:
Blackwell Scientific Publications Ltd, P.O. Box 88, Oxford, England.
I would like to subscribe to Journal of Metamorphic Geology
\Box I wish to pay by cheque and enclose the sum of £US\$
I wish to pay by Access/American Express/Barclaycard/Diners Card/
VISA/Mastercard (delete as neccessary)
Please debit my credit card no.
Expiry date with the sum of £ US\$
Signature Date
Please send me a specimen copy of Journal of Metamorphic Geology
Name
Address
BLACKWELL SCIENTIFIC PUBLICATIONS LTD P. O. Box 88, Oxford, UK Tel: (44) 0865 240201

GEOLOGY TODAY

Published under the co-sponsorship of The Geological Society and The Geologists' Association by Blackwell Scientific Publications Ltd Editors

J.H. McD. Whitaker 11 Guilford Road, Leicester, England Peter J. Smith 32 St James Close, Hanslope, Milton Keynes, England

Geology Today is a magazine for both amateur and professional geologists. The only English-language journal of its kind, *Geology Today* is designed to provide a wide audience of both specialists and non-specialists with intelligible and readable information from different areas of specialization within both pure and applied geology. The editors select two or three feature articles each issue on various topics of current geological interest. Shorter articles, notes, news of geological meetings, exhibitions and field excursions, contributions from foreign correspondents, as well as book reviews keep both professional and amateur geologists abreast of developments and advances in the field. **Subscription Information** *Geology Today* is published bimonthly. Subscription rates for 1990 are: Archival, £58.00 (UK), US\$ 116.50 (USA & Canada) and £70.00 (elsewhere); and Personal, £19.00 (UK), US\$ 37.50 (USA & Canada) and £22.50 (elesewhere) post free.

	e appropriate box and return to: cientific Publications Ltd, P. O. Box 88, Oxford, England.
	ke to subscribe to <i>Geology Today</i>
_	bay by cheque and enclose the sum of £ US\$
	bay by Access/American Express/Barclaycard/Diners Card/
	stercard (delete as neccessary)
	my credit card no.
	with the sum of £ US\$
	Date
Please ser	d me a specimen copy of <i>Geology Today</i>
Name	
Address	

NEW BOOKS FROM BLACKIE

EARLY PRECAMBRIAN BASIC MAGMATISM Edited by R P Hall and D J Hughes

This book was conceived in order to provide a comprehensive review of the basic rocks produced during the first half of the Precambrian, i.e. the Archaean and early Proterozoic, to about 1.7 Ga. This book is for geologists, geochemists, petrologists and economic geologists studying early Earth evolution and planetary development.

Contents

Basic magmatism and crustal evolution. Part I -General Aspects. Archaean basic magmas. Geochemical characteristics of Precambrian basaltic greenstones. Early Precambrian layered intrusions. Noritic magmatism. Mantle evolution. Lunar magmatism. Mineralisation associated with early Precambrian basic magmatism. Part II - Regional Syntheses. Early Precambrian basic rocks of the USA, the Canadian Shield, Greenland and Scotland, the Baltic Shield, China, Australia, India, Africa and South America. References. Index.

504 pages illustrated hardback 0-216-92683-1 £85.00

Academic & Professional Division, Blackie & Son Ltd, Bishopbriggs, Glasgow G64 2NZ,UK. Telephone: 041-772 2311. Telex: 777283 BLACKI G. Fax: 041-762 0897.

AVALONIAN AND CADOMIAN GEOLOGY OF THE NORTH ATLANTIC

Edited by R A Strachan and G K Taylor Expert international researchers have provided a detailed stratigraphical approach to individual areas or terranes. A synthesis of the data highlights the similarities and discrepancies between the geological histories of these areas and provides a model for an improved understanding of the underlying tectonic framework of the belt. The book will be of interest to structural geologists, palaeomagnetists, regional stratigraphers, geochemists and geophysicists.

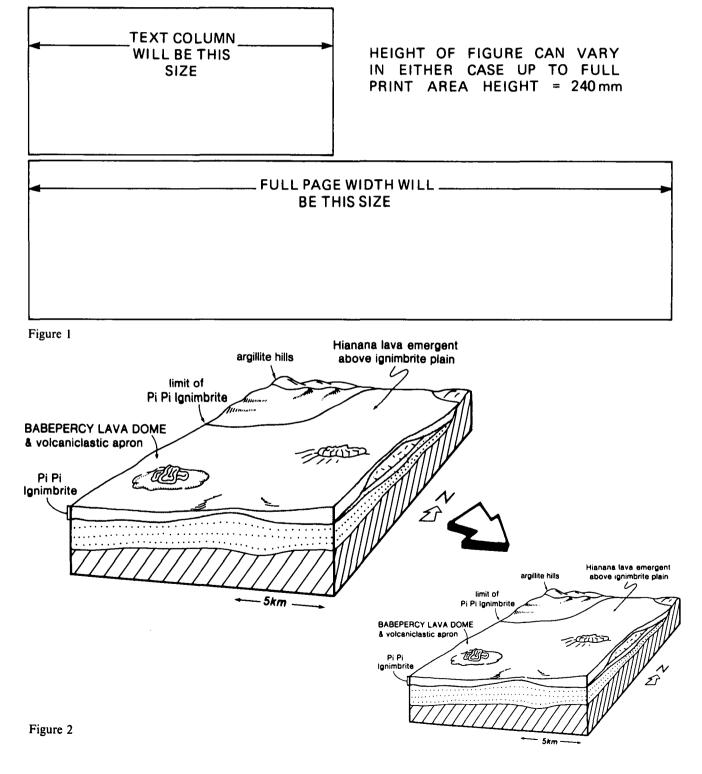
Contents

Introduction. The Longmyndian Supergroup and related Precambrian sediments of England and Wales. Pre-Arenig terranes of northwest Wales. The Rosslare Complex: a displaced terrane in southeast Ireland. Cadomian terranes in the North Armorican Massif, France. Precambrian of the Bohemian Massif, Central Europe. Precambrian terranes in the Iberian Variscan Foldbelt. The West African orogens and circum-Atlantic correlatives. The Avalon Zone type area: southeastern Newfoundland Appalachians. The Avalon Composite terrane of Nova Scotia. The Avalon Zone of New Brunswick. Palaeomagnetic and tectonic constraints on the development of Avalonian Cadomian terranes in the North Atlantic region. References. Index.

264 pages illustrated hardback 0-216-92686-6 £57.00

NOTES FOR AUTHORS ON THE PREPARATION OF FIGURES FOR THE JOURNAL

Original artwork should be submitted at $1\frac{1}{2} \times$ size to be published. The **Author's** name and **figure** number should be clearly marked on the **back** of each piece of artwork. Figures will preferably be either single or double column width when printed (see Figure 1). Illustrations should have **scale bars**, not '×40'. If redrafting is required by the editors, it may be because major savings in print area can be achieved without loss of information: a figure at **column width** and at **half a column height** is equivalent to 300 words; the same shaped diagram printed to double column would take a **whole page** – 1200 words. **Detailed maps** or **multiple logs** may well require a whole page and the size of the lettering should match the necessary reduction. Where necessary break a figure into two facing pages; folding figures will not be accepted. Landscape figures should have no lettering upside down on the final printed page. Avoid where possible gross disparities in lettering size on a drawing. See Figure 2 for optimum size of original and final lettering size. Boxes of ornament should be explained within the figure, not in the caption. The *Magazine* will be able to publish a limited number of free colour plates each year; the editors will decide which plates to accept on their scientific merit. Authors submitting colour plates are asked to give detailed reasons why colour is necessary.



NOTES FOR CONTRIBUTORS

Contributions for publication should be addressed to The Editors, *Geological Magazine*, Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ, England, or may be submitted through a member of the Editorial Advisory Board (addresses inside front cover). Submission implies that the manuscript has not been published previously nor currently submitted for publication elsewhere.

All contributions, whether articles, correspondence or reviews, must be sent in triplicate and typed on one side of the paper, with wide margins and double-line spacing throughout. Any minor corrections should be made neatly in the typescript, leaving the margins clear. Contributions should follow the general style of papers in recent issues of the *Magazine*. The total length of a paper should not in general exceed 12 pages of the new A4 format of the *Magazine*, or 13000 word-equivalents. Priority may be given to short papers. The author is invited to nominate up to five possible referees, who will not necessarily be used.

Articles must be accompanied by a brief, informative rather than indicative, abstract. Headings should be set out clearly but not underlined. Primary headings should be in lower case, at margin, with arabic numeral; subheadings should be numbered 2.a., 2.b., etc., and tertiary headings 2.a.1., 2.a.2. No crossreferences should be given by page number, but 'above' and 'below' should be used with the section specified, e.g. Section 2.a.2. The SI system of units should be used. The author should mark in the margin of the manuscript where figures and tables may be inserted. References to points in larger works should, where possible, quote the page reference, e.g. Ager, 1981, p. 102.

Tables should be typed with double-line spacing on sheets separate from the running text. Each table must

have a caption that will make the data in the table intelligible without reference to the text.

Illustrations should be prepared following the notes for guidance on the facing page. Duplicates of illustrations should be sent, and may be prints or, preferably, photocopies reduced to final size. Figures composed of photographs should be glossy prints presented at publication scale. Figure captions must be typed with double-line spacing on sheets separate from the running text.

The accuracy of references is the responsibility of authors. **References** must be double-spaced and spelt out in full, e.g.

BROOKS, M. & JAMES, D. G. 1975. The geological results of seismic refraction surveys in the Bristol Channel, 1970–73. Journal of the Geological Society of London 131, 163–82.

Books should be cited as:

- AGER, D. V. 1981. The Nature of the Stratigraphical Record, 2nd ed. London: Macmillan, 122 pp.
- BOTT, M. H. P. 1973. The evolution of the Atlantic north of the Faroe Islands. In *Implications of Continental Drift to the Earth Sciences*, vol. 1 (eds. D. H. Tarling and S. N. Runcorn), pp. 175–89. London, New York: Academic Press.

Unpublished work should normally be referred to in the text in parentheses as, for example, 'private communication' or 'unpub. Ph.D. thesis, Univ. London, 1988', and not included in the reference list unless in the press.

Fifty offprints of each paper will be provided free of charge. Additional offprints may be purchased according to a set scale of charges if ordered when the proofs are returned.

Back Volumes: Vols. 1–60 and 112 out of print. Vols. 61–111: Enquiries to Wm Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Volumes 113 onwards are available from Cambridge University Press.

Copying

This journal is registered with the Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$5.00. This consent does not extend to multiple copy for promotional or commercial purposes. Code 0016-7568/ 90 \$5.00 + .00.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Claims for missing issues can only be considered if made immediately after receipt of the subsequent issue.

Advertising: Details of advertising in Geological Magazine may be obtained from the publisher.

Geological Magazine

Volume 127, Number 5, September 1990

TURNER, J. P. & HANCOCK, P. L. Thrust systems of the Southwest Pyrenees and their control over basin subsidence	383-392
LUO ZHILI, JIN YIZHONG & ZHAO XIKUI The Emei Taphrogenesis of the upper Yangtze Platform in south China	393-405
MITCHELL, W. I. & OWENS, B. The geology of the western part of the Fintona Block, Northern Ireland: evolution of Carboniferous basins	407-426
REID, D. L., COOPER, A. F., REX, D. C. & HARMER, R. E. Timing of post-Karoo alkaline volcanism in southern Namibia	427-433
DEBRENNE, F. & WOOD, R. A. A new Cambrian sphinctozoan sponge from North America, its relationship to archaeocyaths and the nature of early sphinctozoans	435-443
WILLIAMS, H. & FLINT, S. Anatomy of a channel-bank collapse structure in Tertiary fluvio-lacustrine sediments of the Lower Rhine Basin, Germany	445-451
KEEN, D. H., ROBINSON, J. E., WEST, R. G., LOWRY, F., BRIDGLAND, D. R. & DAVEY, N. D. W. The fauna and flora of the March Gravels at Northam Pit, Eye, Cambridgeshire, England	453-465
REVIEWS	467-479
PUBLICATIONS RECEIVED	481-482
NOTICES	483

© Cambridge University Press 1990

Printed in Great Britain by the University Press, Cambridge

© Cambridge University Press 1990