# Glasgow Mathematical Journal

## CONTENTS

C. H. Houghton, Embedding inverse semigroups in wreath products	//
Rudolf Heersink, Characterization of certain differential operators in the	
solution of linear partial differential equations	83
J. O. Popoola and I. Tweddle, On the closed graph theorem	89
P. F. Smith, On non-commutative regular local rings	98
D. C. Stocks, On certain triple integral equations with trigonometric kernels	103
P. M. D. Furness and E. Fédida, Transversally affine foliations	106
Raphael Loewy, On ranges of Lyapunov transformations IV	112
P. G. Dixon, Radical Q-algebras	119
S. H. Cox Jr., The purity of a completion	127
Manoranjitham Veluppillai, The diophantine equation $(X[X-1])^2 = 3Y[Y-1]$	130
T. Husain and Yau-Chuen Wong, On various types of barrelledness and the	
hereditary property of (DF)-spaces	134
E. W. Read, The α-regular classes of the generalized symmetric group	144
I. S. Murphy, A note on Cauchy's root test	151
P. E. Kopp, Corrigendum	154
John N. McDonald, Extreme operators on $H_{\infty}$	155
<b>Guyan Robertson,</b> States which have a trace-like property relative to a $C^*$ -subalgebra of $B(H)$	158
P. R. Jones, The lattice of inverse subsemigroups of a reduced inverse semigroup	161

## SCOTTISH ACADEMIC PRESS LIMITED 33 MONTGOMERY STREET EDINBURGH EH7 5JX

### GLASGOW MATHEMATICAL JOURNAL

The Glasgow Mathematical Journal is a continuation of the Proceedings of the Glasgow Mathematical Association, founded in 1952 by the late Professor T. M. MacRobert. It is published with the support of the University Court of the University of Glasgow. The Glasgow Mathematical Journal is published in Parts twice yearly, in January and July; two Parts complete a Volume of approximately 200 pages.

The prepaid subscription for each Volume is £5.00 in U.K., \$14.00 in U.S.A., post free. Single parts may be supplied at a cost of £2.50 in U.K., \$7.00 in U.S.A., net.

Copies may be ordered direct from the publishers or from any bookseller.

## Information for Contributors

While the Glasgow Mathematical Journal is intended primarily for Pure Mathematics, papers on Applied Mathematics will also be accepted. Manuscripts from all parts of the world will be welcomed and given careful consideration.

Manuscripts, preferably typed, should be prepared so as to conform with the practice in current numbers of the *Journal*, especially with regard to line illustrations, references, tables and summaries. The name of the author and the date of the receipt of the manuscript will be printed under the title. Text figures must be suitable for line block reproduction, lettered in pencil, numbered, and separated from the text but allocated clearly to sections of the text.

References should be placed at the end of the paper, arranged and numbered in alphabetical order. In the text, reference numbers should be enclosed in square brackets and underlined, to distinguish them from formula numbers, which should be quoted in round brackets. The following particulars should be given, in the order indicated:

for references to books—author, title, edition, place of publication, year of publication, page reference;

for references to articles in periodicals—author, title of article, short title of periodical, series no. (if any), volume no., year, pagination.

A proof is supplied once in galley form, together with an Order Form for offprints. Offprints are supplied free to the number of twenty-five; additional copies, if ordered prior to publication, will be supplied, at cost, at the request of the contributor. Excessive corrections may be charged to the author.

Manuscripts should be sent to:

THE EDITORS

GLASGOW MATHEMATICAL JOURNAL

DEPARTMENT OF MATHEMATICS

UNIVERSITY OF GLASGOW, GLASGOW G12 8QW