

PROCEEDINGS

OF THE

EDINBURGH MATHEMATICAL SOCIETY

CONTENTS

W. E. WILLIAMS: Note on a paper by Singh and Dhaliwal	page 81
K. A. BROWN AND T. H. LENAGAN: Primary decomposition in enveloping algebras	page 83
MARK L. TEPLY: On semigroup algebras and semisimple semilattice sums of rings	page 87
J. W. BRUCE: On complex projective hypersurfaces	page 91
FRANK HARARY AND JERALD A. KABELL: Counting balanced signed graphs using marked graphs	page 99
RONALD I. BECKER: Limited circle criteria for fourth order differential operators with an oscillatory coefficient	page 105
JAMES HOWIE: On the fundamental group of an almost-acyclic 2-complex	page 119
LIAQAT ALI KHAN AND K. ROWLANDS: On the representation of strictly continuous linear functionals	page 123
M. K. GRAMMATIKOPOULOS and M. R. KULENOVIĆ: On the nonexistence of L^2 -solutions of n th order differential equations	page 131
JAMES A. HUCKABA AND IRA J. PAPICK: Remarks on module-finite pairs	page 137
J. D. MASHBURN: Three counterexamples concerning ω -chain completeness and fixed point properties	page 141
BOOK REVIEWS:	page 147

SCOTTISH ACADEMIC PRESS

THE EDINBURGH MATHEMATICAL SOCIETY

The Edinburgh Mathematical Society was instituted in 1883 for "the promotion and extension of Mathematical Science, Pure and Applied".

Nominations for Ordinary Membership are received at any one Ordinary Meeting and voted upon at the next. Members receive notices of all meetings and may subscribe to the Proceedings at a reduced rate. Further information about membership can be obtained from the Secretary.

PROCEEDINGS OF THE EDINBURGH MATHEMATICAL SOCIETY

Editors: T. S. BLYTH, R. M. DICKER,

A. G. MACKIE, A. M. SINCLAIR, I. N. SNEDDON.

The Society's Proceedings, containing papers embodying the results of research that is original in matter or manner, are published in parts. Three parts complete a volume. One volume is issued each year. Series I comprised forty-four volumes published from 1886 to 1926. Series II commenced in 1927.

Papers to be considered for publication should be sent to the Secretary. Manuscripts (2 copies) should be typewritten on A4 paper with double spacing and generous margins. The style and arrangement should conform to current practice in the Proceedings. References, including titles of papers, should be given in the form adopted by Mathematical Reviews, footnotes being avoided if possible. Figures should be separated from the text and lettered, ready for photographic reduction; their intended location should be clearly indicated. Manuscripts which are not suitable for submission to the printer will not be accepted. Authors are advised to retain a copy of any material submitted, as the Society cannot accept responsibility for any loss.

A proof is supplied once. Authors are particularly requested to correct and return the proof promptly. Excessive corrections may be charged to authors. Fifty free offprints, and additional copies at cost, will be supplied if ordered on a form returned with the proof.

The *Proceedings* are published at the price of £25.00 (\$70) for a volume of three parts.

Enquiries regarding purchase of back numbers should be addressed to

Kraus Reprint Ltd.
9491, Nendeln
Liechtenstein

for volumes of Series I and up to Volume 14 of Series II, and to the publishers

Scottish Academic Press Ltd.
33 Montgomery Street
Edinburgh EH7 5JX

for subsequent issues.

The Society's address is

The Edinburgh Mathematical Society
James Clerk Maxwell Building
The King's Buildings
Edinburgh EH9 3JZ

Communications concerning the Library should be addressed to the Librarian.

All other correspondence should be addressed to the Secretary.

COPYRIGHT © 1981 THE EDINBURGH MATHEMATICAL SOCIETY

Printed in Northern Ireland at The Universities Press (Belfast) Ltd.