



THE ANZIAM JOURNAL

*(The Australian & New Zealand
Industrial and Applied
Mathematics Journal)*

Formerly known as
JOURNAL
of the

AUSTRALIAN MATHEMATICAL SOCIETY
Series B – Applied Mathematics

The Journal of the Australian Mathematical Society began publication in 1959, and from 1975 appeared in two series, Series A (Pure Mathematics and Statistics) and Series B (Applied Mathematics). Series B is now The ANZIAM Journal and is published in volumes comprising four quarterly parts. There is also a fifth (electronic) part designed for rapid publication (<http://jamsb.austms.org.au/>). Editor: A. J. ROBERTS, Department of Mathematics & Computing, University of Southern Queensland, Toowoomba, QLD 4350; roberts@usq.edu.au. All five parts are refereed. Information about Series A and other publications of the Society may be found on the inside back cover.

It is the editorial policy of The ANZIAM Journal to accept papers in any field of applied mathematics and related mathematical sciences. Novel applications of mathematics in real situations are especially welcomed. All papers should include some indication of applicability, and an introduction that can be understood by non-specialist readers from the whole applied mathematical community.

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JULY 2000

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Authors are asked to read the section "Preparation of Manuscripts" on the last page.

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The ANZIAM Journal (ISSN 0334-2700) is published quarterly for A\$250 (Members A\$36) per annum by the Australian Mathematical Society, Mathematics Department, Australian National University, ACT 0200, Australia. Send address change notices to Dr A. Howe, Journal of the Australian Mathematical Society, Mathematics Department, Australian National University, ACT 0200, Australia.

PREFACE TO THIS VOLUME

Some time ago the Division of Applied Mathematics of the Australian Mathematical Society moved in the direction of internationalisation by becoming an Australasian body, as reflected in its change of name to ANZIAM. Starting with the current issue, Volume 42 Part 1, this will also appear in a name change of our Journal from The Journal of the Australian Mathematical Society, Series B to The ANZIAM Journal. We wish to reassure readers and contributors of a continuity in the role, standards and aspirations of the Journal. It is hoped that the new name and cover will reflect better our role as an up-to-date journal of Applied Mathematics.

We have been fortunate in having our new cover designed by Dr Hilary Booth, who is both a mathematician and an internationally recognized artist.

CHARLES E. M. PEARCE

Editor

The ANZIAM Journal

PREFACE TO THIS ISSUE

Conference papers in honour of David Elliott On the Occasion of his Sixty-Fifth Birthday

David Elliott was born in 1931 in Plymouth England, where he attended Sutton High School. His undergraduate years were spent at London University, completing an honours degree in mathematics. David tells tales of working on mathematics on a luxury liner crossing the Atlantic *en route* to Princeton, where he gained a masters degree for his work on problems in boundary layer flows. On his return to London in 1955, he joined the Mathematics Division of the National Physical Laboratory and was introduced to the field of numerical analysis. In particular, Charles Clenshaw exposed David to the delights of Chebyshev polynomials ensnaring David in a mathematical life in the field.

David arrived in Australia in 1957 on a three-month working holiday and, like many others, was captivated by the lifestyle and has remained here ever since. In May 1958, he joined the Mathematics Department at the University of Adelaide, where he completed his PhD under the supervision of Ren Potts. It is not surprising that the topic of his thesis was on the application of Chebyshev polynomials in numerical