

**EDITORIAL:
A CENTENARY OF THE BULLETIN OF THE AUSTRALIAN
MATHEMATICAL SOCIETY**

Professor Bernhard Neumann founded the Bulletin of the Australian Mathematical Society in 1969. With this issue, the Bulletin turns 50 and reaches Volume 100.

The Bulletin was established to relieve the backlog of the Society's Journal. The Journal began publishing in August 1959 and rapidly established a reputation for quality. However, this brought an over-abundance of submitted papers and a serious publication backlog. At its annual meeting in 1968, the Council of the Australian Mathematical Society set up a committee of review with a brief to double the number of pages of mathematics being published.

The first issue of the Bulletin of the Australian Mathematical Society appeared in August 1969. Bernhard Neumann set out his manifesto in an editorial [1].

My first paper was published in about 5 months from being submitted. At the time I thought this was slow: my sister, who was a physicist, had her first paper published in 6 weeks. This was in the antediluvian times of hand composition.

Mathematicians nowadays consider a publication delay well in excess of a year as inevitable and normal. They need, however, much faster spread of their ideas, and the result has been a mushrooming of fast semi-publications and a wide dissemination of preprints.

Meanwhile editorial offices of serious mathematical journals are flooded with meritorious manuscripts, more than they can publish without great delay. A choice has to be made, and in order that justice be done to authors, manuscripts are submitted to a rigorous and detailed refereeing procedure before being accepted or rejected or, frequently, returned to the authors for revision. Refereeing is an honorary, and often onerous, service to the mathematical community, and editors are reluctant to press referees to give this work high priority; the more so as editors know, and referees know, that further long delays arise in the processes of producing the printed journal. Thus delays breed delays.

When the *Journal of the Australian Mathematical Society* found itself caught in this vicious circle of delays and a surfeit of publishable papers,

it increased its number of pages to the limit of financial endurance of the Society; this helped, but was not enough. So the Society decided to embark on the publication of the *Bulletin of the Australian Mathematical Society*, the first number of which is now before you. To relieve the pressure on the *Journal*, the *Bulletin* has taken over from it a number of papers that had been accepted for publication, but that would have had to wait a long time in the queue: one of them, to illustrate my point, had been submitted more than 3 years ago, but most of them much more recently.

One of my principal aims as editor is to ensure a return to fast publication. My target is a median of 5 months from receipt of a paper. This requires a great speeding up of the production processes, and we have accordingly, like others before us, gone in for photo-offset printing from a typescript. The price we have to pay is that many fonts and symbols that mathematicians like to use are not readily available to us. But authors who have used typewriters will, I hope, understand and forgive.

Speeding up production is not all; the pre-production processes must also be abbreviated. Thus I want to keep refereeing as light as possible. I am prepared to accept responsibility for making many decisions myself, without the assistance of expert referees. Where a referee's opinion has to be sought, the referee ought not to be expected to spend much time and work on forming an opinion. If a paper needs more than, say, half a day's work from a referee, its case for speedy publication is not strong enough, and it should go to a different journal. If a paper needs revision, again it has to go elsewhere. This throws much responsibility on the authors—where it belongs. Many authors have come to rely on the referees' advice to improve their papers. I hold that if authors need this advice, and inexperienced authors (but not only inexperienced ones) often do, they should obtain it before submitting their papers: a paper that is to be published in the *Bulletin of the Australian Mathematical Society* must be in its final, publishable form when it is submitted. I have rejected ruthlessly, and expect to have to continue to do so.

Nevertheless a time may come when more good papers are submitted than can be fitted in quickly; then some papers will be returned to their authors at once, so that they can try elsewhere without delay: I hope these authors will also understand, and forgive.

Bernhard Neumann continued as editor for 10 years and produced the first 20 volumes of the *Bulletin*. Table 1 shows the editors up to the present.

After the *Bulletin* settled in, Bernhard Neumann achieved his goal of a mean publication delay under 5 months for the first 5 volumes and the editors who followed have maintained the mission of fast publication. As the scale of the operation grew, production delays intervened and 5 months proved too optimistic. Since 2008

TABLE 1. Editors of the Bulletin of the Australian Mathematical Society

| Editor | Affiliation | Volumes | Years |
|----------------------------------|--|----------|-----------|
| B. H. Neumann | Australian National University | 1–20 | 1969–1979 |
| S. A. Morris | La Trobe University | 21–30 | 1979–1984 |
| S. Oates-Williams | University of Queensland | 31–39 | 1985–1989 |
| A. S. Jones | University of Queensland | 40–53 | 1990–1996 |
| M. G. Cowling | University of New South Wales | 54–65(2) | 1996–2002 |
| A. S. Jones | University of Queensland | 65(3)–76 | 2002–2007 |
| D. E. Taylor | University of Sydney | 77–84(1) | 2008–2011 |
| G. L. Cohen and W. W. L. Chen | University of Technology, Sydney Macquarie University | 84(2) | 2011 |
| G. L. Cohen | University of Technology, Sydney | 84(3)–89 | 2011–2014 |
| J. H. Loxton | Western Sydney University | 90– | 2014– |

(Volume 77), the Bulletin has been published by Cambridge University Press. Papers are now first published online and later published in the printed version. The mean time from receipt of a paper to publication online is around 4 months. This not only meets Bernhard's benchmark by exploiting new technology, but is one of the fastest times to publication for mathematics journals. The mean time to print publication is around 9 months and also amongst the fastest for printed mathematics journals.

The ruthless practices of the editors have changed since Bernhard Neumann set out his approach. The second editor, Sid Morris, established a group of Associate Editors to make recommendations to him in their field while he did an independent evaluation. Only if the Editor and the Associate Editor both thought a paper should be accepted could it be accepted. Since the 1990s, the Editor makes an initial selection of papers for further consideration by the Associate Editors and other referees based on a range of factors linked to the desire for fast publication. There is some leeway for authors to revise their papers to address the issues raised by the referees. But the responsibility for the correctness of the paper rests with the author, not with the referee nor the Editor.

To relieve the pressure on the Journal in 1969, the Bulletin took over a number of papers from the Journal, but after two years, the Bulletin was receiving more than twice as much material as it could publish, so the aim of relieving pressure on the Journal has not been realised. The Bulletin now receives around six times as much material as can be published.

From the beginning, the Bulletin has published abstracts of recent Australasian PhD theses. But, as Bernhard Neumann noted in his annual report in 1972, 'this valuable service is not used nearly as fully as one might hope and expect'. Only around a quarter of those eligible make use of it. Bernhard Neumann held the view that we should aim at 90%. I hope to attract more PhD abstracts.

The geographical distribution of authors published in the Bulletin has changed markedly from the early years. In part, this reflects the growth of universities in Asia,

particularly in China. Half of all submitted papers now come from Asia. It also reflects the ranking of journals for research assessment and the pressure on Australian academics to publish in high-impact international journals. The business of ranking journals is contentious and not a new phenomenon. Alan Jones reported in 1996:

I was disappointed with a recent survey, addressed to mathematics departments, asking them to rate a list of journals. Although this survey was local, it did not include the *Bulletin* in its listings. My only consolation is that it did not include *Proc Roy Soc* or *JFM* either!

The early volumes of the *Bulletin* contain many papers by senior Australian mathematicians. Sadly, this is now much less common.

The type of mathematics published has also changed over the years. The majority of papers have been broadly in pure mathematics (MSC codes 03-59). In the *Bulletin*'s first 4 years, 15% of papers were in applied mathematics and 2% in probability and statistics. These percentages have fallen steadily to 3% and 1% respectively. In part, this reflects the founding of the *ANZIAM Journal* by the applied division of the Australian Mathematics Society in 1975. The main areas published in the *Bulletin* have consistently been combinatorics, number theory, group theory, differential equations, functional analysis and operator theory. I would like a wider range of good papers. The *Bulletin* should promote and reflect the strengths of mathematics in Australia.

In 1997, Michael Cowling noted:

The long-term survival of the *Bulletin* (and of paper journals in general) will depend on their reputation either for quality across a broad spectrum, or for being top in a clearly identified field. . . . The *Bulletin* must raise its profile across a wide range of mathematical areas.

This year marks Volume 100 of the *Bulletin* of the Australian Mathematical Society. The *Bulletin* is committed to quick publication of short papers containing original research in all branches of mathematics. Please consider.

Acknowledgements

I gratefully acknowledge comments from Sid Morris and Michael Cowling, previous editors of the *Bulletin*, and Peter Stacey, Secretary of the Australian Mathematical Society.

Reference

- [1] B. H. Neumann, 'Editorial', *Bull. Austral. Math. Soc.* **1**(1) (1969), 1–2.

J. H. LOXTON
Editor