



# Editorial

David and I welcome you to the first issue of the *Gazette* for 2015.

While we hear repeatedly that the number of high school students studying advanced mathematics subjects continues to drop, it is very pleasing that newspapers such as those published by Fairfax Press continue to take an interest in, and publicize, arguably the best mathematician in the world, Adelaide born Fields Medalist and recipient of a US\$3 million 2015 Breakthrough Prize in Mathematics, Terrence Tao. It is nice to see him presented as a 'refreshingly normal' prodigy, family man and the Mozart of Mathematics. It is well worth watching the short video which accompanied the four-page article. (Terry Tao is to be a Plenary Speaker at the AustMS 2015 Meeting to be held 28th September to 1st October, 2015 at Flinders University.)

<http://www.theage.com.au/good-weekend/-13fwcv.html>

It is sad indeed that we entered 2015 with the fate of university funding and research funding still unclear. This reminds me of Nero playing the fiddle while Rome burnt. Higher education and research are too important to the future of Australia to be a political football. It is most likely that the result will be an Own Goal.

Congratulations to Professor John Sydney Croucher of Macquarie University who has been made a member (AM) in the Order of Australia 'for significant service to mathematical science in the field of statistics, as an academic, author, and mentor, and to professional organisations'.

The Australian Academy of Science has announced its 2015 Honorific medals for scientific excellence, and the 2014/15 AK Head Mathematical Scientists Travelling Scholarship. Details are given in an article in this issue. Congratulations to Professor Gustav I. Lehrer FAA of the University of Sydney, Professor Alan G.R. McIntosh FAA of the Australian National University, Professor Trevor J. McDougall FAA FRS of the University of New South Wales, Associate Professor Catherine Greenhill of the University of New South Wales, Dr Scott Morrison of the Australian National University, Associate Professor Yee Hwa Yang of the University of Sydney and Hien T. Nguyen of the University of Queensland.

**Breaking News:** Congratulations to Professor Cheryl Praeger AM FAA who was inducted into the Western Australia Women's Hall of Fame in recognition of 'her outstanding contribution to the education of girls and women in a field once considered the realm of the male gender'.

The relationship between the Australian Mathematical Society (AustMS) and Cambridge University Press dates back to the early 1980s when I negotiated the publishing of a new series of books by Cambridge University Press called the 'Australian Mathematical Society Lecture Series'. Today the three AustMS journals,

the BULLETIN, JOURNAL and the ANZIAM journal are published by Cambridge University Press. In the days of libraries throughout the world purchasing electronic ‘bundles’ of journals this relationship has proved enormously positive for authors in our journals and for the finances of the Society. This allows AustMS to support a large range of research activities.

In this issue we hear from the new President of AustMS, Professor Tim Marchant. Tim encourages you to vote in favour of Australian and New Zealand Association of Mathematical Physics (ANZAMP) becoming a division of AustMS — a position supported by the AustMS Council. ANZAMP is very active in promoting Mathematical Physics in Australia via workshops and conferences. Tim also reminds us that under the ERA assessment, the imperative has become ‘Publish and be Cited, or Perish’, and records easy steps you can take to improve your citation rate.

Professor Nalini Joshi, Chair of the National Committee of Mathematical Sciences, mentions that the Office of the Chief Scientist released a ground-breaking report called ‘Benchmarking Australian Science, Technology, Engineering and Mathematics’ and discusses its contents in this issue.

Professor Geoff Prince, Director of AMSI, brings to our attention ‘AMSI’s Research and Higher Education Committee has commissioned a review of the AMSI Workshop Program. Details of the current program and the relevant committees can be found at [www.amsi.org.au](http://www.amsi.org.au). The review will not be concerned with the operational aspects of the current program, but with the purpose of the program, the range of events that we support and the way in which that support is specified. The mathematical sciences community is invited to make submission to the review.’

Amongst the many newsworthy items from around the country in our News section, we mention here that in ‘November 2014, TTG Transportation Technology (a small Sydney-based company) won the National Export Award for the Environmental Solutions category. The award was for Energymiser — an on-board computer that advises train drivers of energy-efficient driving strategies. Energymiser was invented at UniSA by Professor Phil Howlett and Dr Peter Pudney using the mathematics of optimal control and has been developed over the past 15 years by TTGTT and UniSA. Details can be found at <http://www.exportawards.gov.au/winners/2014/ttg-transportation-technology-nsw>.’

This issue also contains a report on the 51st ANZIAM Conference held 1–5 February 2015 in Surfers Paradise and for which 229 people registered. There is also a report on the winners of the various ANZIAM Medals, Prizes and Scholarships.

There is a call for nominations for Prizes, Fellowships and Scholarships offered by the Australian Mathematical Society.

As usual, this issue also includes the entertaining and challenging Puzzle Corner, Book Reviews and Lift-Off Fellowship reports.

David and I hope you find this issue of the *Gazette* both interesting and informative.

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Sid Morris retired after 40 years as an academic. He received BSc (Hons) from UQ in 1969 and PhD from Flinders in 1970. He held positions of Professor, Department Head, Dean, Deputy Vice-Chancellor, CAO and CEO. He was employed by the universities: Adelaide, Ballarat, Flinders, Florida, La Trobe, UNE, UNSW, UQ, UniSA, Tel-Aviv, Tulane, Wales, and Wollongong. He was Editor of *Bull. AustMS* and *J. Research and Practice in IT*, and founding Editor-in-Chief of *AustMS Lecture Series*. He was on the Council of AustMS for 20 years and its Vice-President. He received the Lester R. Ford Award from the Math. Assoc. America. He has published 140 journal papers and 4 books for undergrads, postgrads and researchers, plus an online book, supplemented by YouTube and Youku videos, and translated into 6 languages. The third edition of the 900-page book *The Structure of Compact Groups* by Karl H. Hofmann and Sid was published in 2013 by Water De Gruyter GmbH, Berlin/Boston.