



President's Column

Peter Forrester*

As I begin to write this column, a media release has just been circulated announcing the latest Australian scientists to be elected to the Australian Academy of Science. AustMS is proud to see that two of our members, Ben Andrews and Andrew Hassell, both from the ANU, are among this list of very distinguished new Fellows—our heartiest congratulations go out to Ben and Andrew for this recognition. This comes at a time when the Australian Academy of Science is prominent in the concerns of AustMS through its overseeing of a Decadal Plan for the Mathematical Sciences. I mentioned the Decadal Plan briefly in my previous President's Column; its importance warrants it being my main theme this time round. A past AustMS President, Nalini Joshi, in her capacity as Chair of the National Committee for Mathematical Sciences, began the process in earnest early last year, by undertaking a fundraising drive, forming a steering committee, and generally giving airplay to this very important happening—recall for example Nalini's *Gazette* article published in July last year.

A number of AustMS members have key roles in the subcommittees formed by the steering committee. For example, new FAA Andrew Hassell is a co-chair of sub-committee three relating to research in the mathematical sciences in the university sector, and I'm chairing sub-committee six relating to research centres. Also, AustMS secretary Peter Stacey has taken on the role of a project officer, which despite its modest title is very important in co-ordinating submissions. Already Peter has convened meetings in the various capital cities to collect together opinions offered at Decadal Plan presentations he gave, in partnership with a local presenter, from the attendees. As mentioned in my previous column, written submissions can be made through the appropriate website, with the closing date now the end of April.

One of the common threads to emerge from Peter's summary of the meetings has been the recognition of the need to redouble our efforts to work with the various interested parties in the mathematical sciences in a progressive way. At the university level, this relates to the crucial issue of service teaching, which in turn relates to the reality—already commonplace in statistics—that applied mathematicians can often have appointments outside of a mathematical sciences department. At the Australian Council of Heads of Mathematical Sciences annual meeting earlier this year, Cristina Varsavsky, the associate Dean (Education) for Science at Monash spoke on the issue of service teaching. One take home point was the challenge, or indeed need, to have hard data on why service teaching is best carried out within the mathematical sciences department rather than the department requiring that their students have this knowledge. On the issue

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of leveraging extra government funding, the reality that we need to go beyond convincing the government itself and also make the case to industry and business, was noted on a number of occasions. Although the set up of AustMS is not optimised for this purpose, we are very fortunate that AMSI has appointed several board members well known and respected in industry and business.

A number of other countries have recently produced reports relating to the future of their mathematical sciences. Two examples are Canada and the US. In the US, the National Academy of Sciences commissioned a report 'The Mathematical Sciences in 2025'. There an increasingly important role is envisaged for the mathematical sciences in interdisciplinary research, to the extent that it is recommended the education of future generations of mathematical scientists should be re-assessed in this light. In particular, a call was made to increase the number of mathematical scientists trained to have knowledge across a broad range of disciplines, an understanding of the role of mathematics in broad applications, to have some experience with computation, and to communicate well with researchers in other disciplines. On the national front, late last year saw the release of the National Research Investment Plan. In my role on sub-committee six relating to research centres, I was most interested to read on the topic of National Research Infrastructure that the best value for money is obtained when infrastructure encourages increased collaboration among Australian researchers, including business researchers, and provides facilities that attract increased collaboration and support from international researchers and investors.



Peter Forrester received his Doctorate from the Australian National University in 1985, and held a postdoctoral position at Stony Brook before joining La Trobe University as a lecturer in 1987. In 1994 he was awarded a senior research fellowship by the ARC, which he took up at The University of Melbourne. Peter's research interests are broadly in the area of mathematical physics, and more particularly in random matrix theory and related topics in statistical mechanics. This research and its applications motivated the writing of a large monograph 'log-gases and random matrices' (PUP, Princeton) which took place over a fifteen-year period. His research has been recognised by the award of the Medal of the Australian Mathematical Society in 1993, and election to the Australian Academy of Science in 2004, in addition to several ARC personal fellowships.