



NCMS News

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On Tuesday 25 March 2014, the Academy held a meeting of Chairs of all National Committees for Science. You probably think I am odd, but I found it an uplifting exercise. Since mathematics does not exist in isolation from the sciences, I wanted to describe some of the issues from this meeting, as well as the ensuing strategies and proposed actions that inspired me.

The Academy did well not only in bringing Chairs of the 22 National Committees together, but making sure that the challenges and ideas arising from each discipline area were heard by all. The meeting of all Chairs used to be an annual affair but this one was held over for three years until the recent review of National Committees was finished. So there was a lot to say and to hear.

It was interesting to note that seven committee chairs stated an interest in developing a new decadal plan: (i) Agriculture, Fisheries and Food, (ii) Astronomy (this will be their third one), (iii) Chemistry, (iv) Earth Sciences, (v) Geographical Science, (vi) Information and Communication Sciences and (vii) Materials Science. Of the two that completed a decadal plan recently, Space & Radio Science intends to carry out a mid-term review and Physics is developing an implementation plan.

I heard for the first time about other promising initiatives based on individual characteristics of each scientific area. Agriculture, Fisheries and Food is working on a white paper on Australia's agricultural competitiveness. Antarctic Research is planning a major cultural event in 2015 called 'Pure Antarctic' to improve awareness of Australian Antarctic Science. Biomedical Sciences is promoting education through CUBenet — a network of biomedical science educators and advocacy to government agencies. Brain and Mind intends to develop a website to facilitate information exchange between brain imaging centres in Australasia. Cellular and Developmental Biology is considering a position paper on stem cell research and applications along with a possible Q&A booklet to reach the public. Chemistry is concerned about the accreditation process for chemistry teachers and weighing up different options. Crystallography is celebrating the International Year of Crystallography by facilitating photography and art exhibitions and crystal growing competitions, as well as organising commemorative Australian postage stamps of the first five Australian Nobel Laureates. Data in Science plans to develop a policy paper to help realise a culture of open data in Australian science. History and Philosophy of Science focuses on communication through biennial essay competitions and a workshop on current issues. Mechanical and Engineering Sciences has established the John Booker medal for Engineering Sciences. Nutrition undertakes public and scientific awareness campaigns focusing on one or two crucial issues per

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year. Physics will be participating in outreach activities for the International Year of Light in 2015.

Imagine doing all of this for the mathematical sciences. First, how are we doing on postage stamps? It seems the golden decade of Australian mathematical stamps occurred in the 1970s. To the best of my knowledge, Australia issued five postage stamps that feature mathematics: abacus, 1972; best fit curve, 1976; golden section, 1972; graphs, 1974; metric system, 1973. But alas, no postage stamp was issued to celebrate Terry Tao's Fields medal.

Second, in 2013, generous support by AMSI enabled a year-long celebration of the Mathematics of Planet Earth program in Australia. But in general, our public campaigns to raise awareness about mathematics have focused on low achievements in international tests, the scarcity of teachers qualified in mathematics and poor funding levels for mathematics departments in universities. It would be good to reflect on why our efforts in the media do not tend to focus on more positive, enjoyable and affirming aspects of mathematical sciences in a way that is accessible to the general public.

At the Chairs of National Committees meeting, we also heard from the Academy's Early- and Mid-Career Researchers (EMCR) Forum. This spectacularly energetic group with over 3000 members publishes a regular newsletter called 'Early Days', and holds national meetings called 'Science Pathways'. While it has so far tended to attract members in the medical and engineering sciences, it is keen to involve EMCRs from a wider range of disciplines. An EMCR participates as an intern on many of the National Committees. We recently enlarged the group of observers on the National Committee for Mathematical Sciences to include an earlier-career researcher and are about to appoint a new EMCR as an observer. Please encourage keen early- and mid-career mathematical researchers to sign up at <http://www.sciencearchive.org.au/ecr/ecrlist.html>.



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