

EDITORIAL

The 2013 Australian Conference on Science and Mathematics Education (ACSME) celebrates the 19th year of tertiary science and mathematics educators meeting to discuss, evaluate, explore, share, question, debate, and be inspired by innovations and ideas that support best practice in the teaching of science and mathematics. This conference (previously known as the UniServe Science Conference) is your chance to share progressive practice. It is a great opportunity for you to develop collaborations with your colleagues, those familiar and those new, as we all work to improve and extend the experience and understandings of students studying in the fields of science and mathematics. Are we falling behind? Australia's Chief Scientist, introductory keynote speaker for ACSME2013, in a recent speech at the launch of the Mathematics for Planet Earth Conference said:

“[The number of] Males enrolling in maths degrees in Australia (both undergraduate and higher degrees) is about half the OECD average. For women it is about a third of the OECD average... So we are not just facing a diminishing of our mathematics capacity. We risk losing our place in the world... If we continue on our current trajectory, it is possible we will not have the right amount or the right kind of maths or mathematicians when we need them, and where we need them.” *Professor Ian Chubb, Australia's Chief Scientist, 9 July 2013.*

Our society needs us to continue to step up to ensure that our graduates are literate in the sciences and mathematics, to assist them to develop sophisticated skills in problem-solving, to stimulate the development of sceptical and creative minds.

This year the conference is held in Canberra, Australia, the second time that the conference has been held outside Sydney. In the future, we look forward to the conference being hosted in venues across Australia, alternating with the traditional Sydney venue, in a plan to enable greater involvement of staff in institutions across the country.

ACSME2013 is presented by a partnership of institutions from the ACT and regional area. The University of Canberra (UC) and the Australian National University (ANU) have provided venues for the pre-conference Discipline Day and the Conference days, respectively. These institutions are partnered with the University of New South Wales (UNSW Canberra) and Charles Sturt University (CSU) to present ACSME2013 under the theme of *Students in transition – The learners' journey*. This overarching theme is teased out into component strands of:

- Transitions to higher education in science and mathematics: managing the relevance of higher education to diverse cohorts.
- The development of students as researchers: from analysts and interpreters to generators of knowledge.
- Science and the professions: shifting the focus from content

In 2013 staff and students from 30 institutions across Australia and New Zealand are presenting their work for you to consider – to stimulate and challenge you. The 2013 Program Committee had the pleasure of receiving 103 submissions from all states and territories of Australia apart from the Northern Territory – perhaps complete coverage can be a goal for 2014! Contributions from the University of Auckland and Victoria University of Wellington were also welcomed, emphasising the commonality of issues, practices, innovations and challenges across Australasia.

Thank you to the members of the ACSME2013 Organising Committee and the Programming Committee for the significant effort involved in organising and hosting this conference. Thank you too to all the authors and participants at this conference and I hope you find it thought-provoking, energising and enjoyable.

Dr Paula Newitt
Chair (Organising Committee), Australian Conference for Science and Mathematics Education 2013