



Philip Broadbridge*

Support for advancement of mathematical sciences

July has been a momentous month for the profile of mathematical sciences in Australia. UNSW hosted the very first Congress of the Pacific Rim Mathematics Association. In the following week, for the first time, Australia hosted the four-year congress of the International Association for Mathematics and Computers in Simulation, in conjunction with MODSIM09, in Cairns. By every measure, these events were very successful; congratulations to the organisers. With cooperation from MASCOS, AMSI was a major sponsor for both congresses. Near the end of July, the AMSI-MASCOS-UNESCO workshop, 'Future Models for Energy and Water Management', was held at QUT. I was very pleased with the number of registrations, the quality of the short courses and talks and with the support from UNESCO Hydrology. Such interdisciplinary activities are highly valued by our political masters as we demonstrate the value of the mathematical sciences.

Having sat on the 2004 advisory committee for the NSF-funded Institute for Mathematics and Applications (Minnesota), I appreciate the value of long-term thematic programs of the type that are run in mathematics institutes in the northern hemisphere. These require a higher level of funding to cover six-month salary buy-outs for program leaders and guest lecturers. They also require assurance of long-term funding so that theme programs can be planned well in advance. In Australia, there is no government funding program that satisfies both of these requirements and which can support a discipline as broad as all of mathematical science. We must continue to remind governments that we lag the rest of the world in supporting such activities. AMSI has in the past been able to support some more modest shorter theme programs of 2-3 weeks, in the areas of ecological management, mathematical physics, entropy theory and finite mathematical structures. Even for short study programs, it is not easy to achieve widespread involvement when academic workloads are high, in a climate of job insecurity.

AMSI welcomes the University of Adelaide as the ninth Joint Venture Partner. Observers have complimented the mathematical sciences profession on how much it has been able to achieve through such united support for AMSI, despite systemic difficulties in the tertiary education sector. With MASCOS nearing the end of its term, it is important for mathematical sciences to be prominent in the next round of ARC Centres of Excellence. Whatever mathematics institute structures are generated in the near future, their leaders would be foolhardy not to make use of the network of influence, infrastructure and experience built up by AMSI over the past seven years.

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The level of support for the ICE-EM education program will ensure that AMSI exists for the three-year term of the next director. I wish the new director all the very best in confronting challenges that are well worth confronting and I ask all readers to volunteer a little of their time to assist in some way.



Director of AMSI since 2005, Phil Broadbridge was previously a professor of applied mathematics for 14 years, including a total of eight years as department chair at University of Wollongong and at University of Delaware. His PhD was in mathematical physics (University of Adelaide). He has an unusually broad range of research interests, including mathematical physics, applied nonlinear partial differential equations, hydrology, heat and mass transport and population genetics. He has published two books and 100 refereed papers, including one with over 150 ISI citations. He is a member of the editorial boards of four journals and one book series.