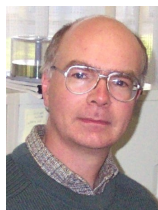


THE ANZAAS MERCURY

ANZAAS: To Create a Scientifically Literate Society

Issue No. 52, Mar 2012

Editor's Edict



Please enjoy this issue, which includes. Malcolm Jenkins's report on reinventing ANZAAS, p1. Also see 'Our Response to Climate Change: the Role for Art?' (ANZAAS Debate, and 'Connecting Mainstream Public to Science' (Special Report), and don't forget Victor Bien's expert media report on the back page.

-Duncan Rouch



Malcolm's Matters

Report From The Chair
By Malcolm JENKINS

Reinventing ANZAAS

We were off to a busy start this year and have hit the ground running. There have been a number of important issues to address and I am pleased to say that most of these are progressing on track. Many thanks to the effort and hard work put in by the committee over the last month. ANZAAS is a volunteer organisation, for which all the time that people invest in ANZAAS' initiatives is to make them happen and is greatly appreciated.

I am pleased to announce that Justin Sorbello has volunteered to fill the vacancy of Deputy Chair, a position which was not filled at the Federal AGM last year. Justin brings a diverse range of skills to the committee. Justin graduated in Mechatronic Engineering from Monash University in 2010 and now works as an engineering consultant at Sinclair Knight Merz. He is currently serving his 2nd term as the President of the Melbourne Chapter of the Young Scientists of Australia (YSA) and has been involved in their organisational committee for the last 8 years. His work with the YSA is primarily on promoting and organising events to engage young people in science. Justin has been a valuable Member of the ANZAAS Victorian Division committee for

several years and was the primary driving force behind the highly successful combined ANZAAS-YSA dinner last year. I welcome his nomination and encourage every member to endorse his appointment nomination according to constitutional procedure when official notification arrives. Given that Justin is the sole nominee it is expected that he will be confirmed in the position at the end of April next month. The organisation of Youth ANZAAS 2012 is already well underway and an exciting week for the students is planned. This year Youth ANZAAS will be in Dunedin from Friday 29th June until to Friday 6th July. The event is being run a little earlier this year to coincide with the International Science Festival so mark these dates in your diary. If you know of any students interested in attending please urge them to get their applications in early to avoid disappointment. The Science Festival is a well-established non-profit community event in Dunedin which aims to showcase and celebrate community science and inspires us all to think about science in ways we never have before and how it impacts our everyday lives. This year the Festival has the theme of "What makes us tick?".

Contents

Editor's Edict	1
Malcolm's Matters- reinventing ANZAAS	1
ANZAAS Debate:	
Our response to Climate Change:	
the Role for Art?	3
Special Report	
Connecting Mainstream Public to Science.	5
Poronnik's Points	7
Media Report	8

ANZAAS

Australian and New Zealand Association for the Advancement of Science

Post: PO Box 788, Northcote VIC 3070. Telephone: 0408 373 114

E-mail, Malcolm Jenkins: chair@anzaas.org.au

Web-site: <http://www.anzaas.org.au>

ABN: 79 883 488 910

ANZAAS Mercury, E-mail: newsletter_editor@anzaas.org.au

Editor in Chief: Duncan Rouch; ANTENNA Editor: Rachel Morison



The festival programme features a diverse range of International guest speakers, entertainments, demonstrations and hands on workshops. In addition to this the students will visit leading New Zealand Universities and research facilities. On other fronts there was also a flurry of activity for submissions in the recent Inspiring Australia round of grants and many valuable discussions on collaboration were had. One of the initiatives that is currently under discussion is the National Community Science Dialogues Programme (NCSD), a proposed joint venture between University of the Third Age and ANZAAS.

The purpose of the NCSD is to create a database of eminent Australian scientists, drawn from the research community, who are willing to give presentations and demonstrations to public audiences from time to time. The data base will be available to the general public but presenters chosen to give talks in various geographical locations will be selected by U3A Groups. Once established the NCSD internet based framework will provide a foundation for trials of a major extension to the Programme, namely Community Science itself.

A unique feature of the NCSD is that the principal scientist (the presenter) will be accompanied by some of his students and research staff. In this way several experts in the field will be able to 'work the audience' and enable a much more intimate familiarisation of the audiences with practitioners and

their topics during the period of informal interaction after the presentation. I would like to thank Mike Murray for all his hard work thus far and look forward to further discussions to forward this project.

Some of you may have noticed some of the problems we have been having with our current website, and the roll-out of a new and more user friendly website is now one of the committee's top priorities. We hope to have it up and running soon so watch this space. Please check it out and give us your feedback so we can make it better and more useful to you.

Malcolm Jenkins

Chairman, ANZAAS Council (chair@anzaas.org.au)

Mar 2012

On the Australia Day 2012, Professor J. Mazumdar, ANZAAS Member, was awarded the Order of Australia (AM). Professor Mazumdar's principal research interests are in the fields of Biomechanics, Biomedical Engineering and Solid Mechanics. He



is based at the School of Electrical and Electronic Engineering & School of Mathematical Sciences, The University of Adelaide. He has done interesting work on non-invasive study of heart valves tissue pathology by spectral analysis of heart sounds as well as by two-dimensional sector-scan echocardiography. He has also studied vibrations of tympanic membrane (ear drum) by time- averaged holography. He is also involved in research on spinal Biomechanics and Biofluid Mechanics.

Professor Mazumdar is now working in the field of Tissue Engineering and NanoBioscience. In particular, he is involved with research on Tissue Engineering on Cartilage. In this project, he is particularly interested in articular cartilage. Articular cartilage is a living tissue but very limited capacity to repair itself. Instead, any damage to the articular surface tends to spread allowing the bones to rub directly against each other and resulting in increasing joint pain and loss of joint movement. It can also lead to osteoarthritis (a slow degeneration of articular cartilage). It is the most common form of arthritis in Australia, about 10% of the total population. In United States alone, more than 1 million people per year suffer from osteoarthritis, a degenerative joint disease caused by damaged articular cartilage.

Dr. Mazumdar received his B.Sc. with a First Class Honours and M.Sc.in Applied Mathematics from Patna University, India, and his Ph.D. degree in Solid Mechanics from Moscow State University, Russia. After completing his Ph.D., he came

to South Australia in October 1966 on an appointment initially as a Lecturer, then a Senior Lecturer and subsequently a Reader in Applied Mathematics at the University of Adelaide. In 1968, he was conferred an honorary Ph.D. degree (ad eundem gradum) by the University of Adelaide, and the title of Associate Professor was conferred on him. He has also been appointed as an Adjunct Professor jointly with the School of Electrical and Electronic Engineering and the Discipline of Applied Mathematics in the School of Mathematical Sciences. Also he has been appointed an Adjunct Professor within the School of Electrical and Information Engineering, University of South Australia, Mawson Lakes Campus and, in the School of Engineering and Industrial Science, Swinburne University of Technology, Melbourne, Australia.

In 1972, Professor Mazumdar was a Visiting Professor in the Department of Mechanics of the State University of New York at Stony Brook, and in the Department of Metallurgy, Mechanics and Materials Science of the Michigan State University, East Lansing. He again spent another year of sabbatical in 1977 as a Visiting Professor in the same department of the Michigan State University. Professor Mazumdar also spent four months from February through May, 1982 in the Department of Biomedical Engineering at the Medical School of McMaster University, Hamilton as a recipient of the International Science Exchange Award of Canada. During 1987-1988, Professor Mazumdar was a Visiting Professor in the Department of Applied Mathematics, Indian Institute of Science, Bangalore, India and, in the Department of Mechanical Engineering, Waterloo University, Canada .In 1993, Professor Mazumdar was a Visiting Professor of Mathematics at IIT Delhi and in 1998-99, was a Visiting Professor in the School of Mechanical and Production Engineering, Nanyang Technological University, Singapore.

The ANZAAS Debate – Our Response to Climate Change: the Role for Art?

By Duncan ROUCH

Many people are not seriously getting the message about climate change and sustainable development, and the arts can help, states Guy Abrahams, environment arts consultant, with CLIMARTE (1). Writing in 2005, CSIRO science writer Simon Torok and US science writer Bill McKibben, independently asked that though we can register what is happening to our planet with satellites and scientific instruments, can we register it in our imagination, the most sensitive of all our devices? (2, 3). What the warming world needs now is art, they both concluded. Since then a burgeoning number of artists have become involved in the campaign for society to respond to the challenges of climate change.

In Australia today art meets science in CLIMARTE, which is an independent, not for profit, body that harnesses the creative power of the arts to inform, engage and inspire action on climate change. CLIMARTE was co-founded by Guy Abrahams, Fiona Armstrong and Deborah Hart. CLIMARTE aims to provide opportunities for people to participate in campaigns, to promote and attend climate and sustainability related arts events, and to provide and share useful, inspiring and motivating information. To advocate for immediate, effective

activist; and Jessie Boylan, photomedia artist. This included discussing how campaigners and artists can work together to



Copenhagen? Climate change mural, Melbourne, by artist Ash Keating, pictured left (1).

create change.

The international organisation EARTH collaborates with creative people to transform the human rights and environmental issues connected to climate change into

powerful art that gets people to stop, think and act. It is based at 350 EARTH, in which that 350, is the number parts per million CO₂, which is the most important number in the world, as higher than it the world simply would not work in the ways it must for our civilization to survive.

Eve Mosher is an artist based in Brooklyn, New York. Her interactive public works have created simple experiences as a method for exploring our urban environment. In collaboration with EARTH she created the project "Insert Here", as an interactive public art project. The project capitalizes on community awareness of place and optimism around climate change solutions. The project invites people to place bold yellow "Insert Here" arrows in



Art meets climate change in the global EARTH project, 'Insert Here', by Eve Mosher (2).

and creative action on climate change CLIMARTE has created a broad alliance of arts organisations, practitioners, administrators, patrons and academics from across the spectrum of the arts sector, including the visual arts, music, theatre, dance, literature, architecture, and cinema.

The arts have a major role in recording and reflecting on cultural change. The arts can have empowering effects on communities, in creating feelings, developing meaning and helping people to imagining the future. An example event run by CLIMARTE was the Art & Campaigning Forum, held in Melbourne during March, which featured artists Tom Civil, community graphic designer and artist; Arlene TextaQueen, Australia's felt-tip super-heroine; Van Thanh Rudd, artist and

locations in their community where they want to "insert" a climate change solution. For example "Insert bike lane here" "Insert community garden here", "Insert solar panels here." By placing these arrows along people's daily migratory paths, individuals and groups can share their proposed solutions with the greater community.

Depicting the folly of environmental destruction

Environmental artist Nicole Dextras builds giant words made of ice in the heart of vulnerable and often cold landscapes. She does this by constructing wooden letter frames anywhere from

45 cm to 2.4 m tall that she then fills with water and leaves outside to freeze. Two weeks later, once the words are solid, Dextras removes the frames and leaves her frozen sculptures at the sun's mercy. Eventually they melt – which she says subverts the power of the English language and commercial signage by depicting how vulnerable they are.



EARTH art from satellite: at Santo Domingo people formed the image of a person standing on the roof of her house as the waves threaten to submerge it (5).

In 2010, 350.org launched EARTH, the world's first ever global satellite art project. In over 16 places around the world,

the public collaborated with artists to create art so large it could be photographed from space (4). For example, at Santo Domingo, Dominican Republic in November 2010 people were arranged to form the image of a person standing on the roof of their house as the waves threaten to submerge it. It's a little hazy or cloudy, but the view from 480 km up is unmistakable (5).

Conclusion

Within our community art's catalytic agency is its capacity to trigger conversations, either with one self or others. These conversations potentially lead to new questions and answers, new insights and perspectives, which might never have been previously pondered. These reflections can be expected to help promote actions, such as in response to climate change.

References

1. CLIMARTE (2011-2012), <http://www.climarte.org/>
2. Simon Torok (2005) Picturing Climate Change. Artlink, Vol 25 no 4.
3. Bill McKibben, (2005) What the warming world needs now is art, sweet art
<http://grist.org/living/mckibben-imagine/>
4. 350 Earth (2010-2012), <http://earth.350.org/>
5. Art from satellite (2010),
<http://www.good.is/post/climate-art-from-outer-space-satellite-photos-from-350-earth-start-rolling-in/>

Special Report

Connecting Mainstream Public to Science

By Duncan ROUCH

The science 'brand' has lost appeal

A fundamental issue for science is that the underlying 'brand' of science lacks Mainstream appeal. People are accustomed to being marketed to and 'wooed', or at least spoken to in a voice that addresses 'me', which is missing in most current science communication.

To investigate this problem and better understand the public's attitudes to science, a relevant research project was recently conducted in New Zealand (1). This breakthrough investigation also has lessons for Australia. In this investigation the public was divided into five segments, including a 'Mainstream' group, of 44% of the general public, which was identified as a key interest group. The 'Mainstream' group was defined as including people that recognise that science delivers some benefits, but do not seem to think science is an important part of their daily lives. Characteristics of the group included lower social demographic, little or no formal science training, using a range of information mediums including Facebook, internet, television and magazines and a mix of males and females. They believe science information is conflicting and too specialised for them to understand. Their lack of interest around 'new science ideas' suggests that science lacks relevance to them. This group was chosen for further

study, to gain a deeper understanding of their attitudes to and perceptions of science.

The 'Mainstream' group was itself divided into six discussion groups, based on age and whether located in the city or country. In summary they see pure science is more trusted but less relevant, while technology/commercial science is more relevant but more sceptically evaluated.

Distant and disempowered

A number of factors 'distance' science from Mainstreamers. Science streaming at school separates Mainstreamers from academics, creates elitism and disconnects 'intellectual science' from the 'world around me' science. This implies to Mainstreamers that science is not for them. The concept of 'science' is therefore concerned with pure science and laboratories, and is disconnected from 'my daily life'.

In group discussions Mainstreamers highlighted a wide variety of views and opinion, but their thinking was characterised by indecision. They seemed paralysed by conflicting viewpoints, without strong reference to any decision framework. Potentially this reflects a lack of strong belief systems, and a society that has fewer 'entrenched truths and nothing is black and white. As a result the mainstream public hold very little active opinion, as one view would be countered by the opposing view, and so 'neutralise' opinions. So they become disempowered and suspend their judgement. Older Mainstreamers, however, find relevance and more active engagement within their personal portals of interest (e.g. cancer cures, nutrition, black holes).

For connecting the science community to Mainstreamers it is critical to build trust, as Mainstreamers expect openness and transparency from science, not a pitch to win support, and clear accountability. Mainstreamers believe science also needs to take account of public sentiment. While Mainstreamers may not seek active involvement in decision making, there is an implied expectation that there is ongoing dialogue between science and the general public, and that science remains in sync with public culture and morals. Science needs the rudder of public values, as much as the public need to understand the opportunities that science presents.

People have stronger opinions and parameters about more polarised issues that challenge their sense of what's right or wrong. Issues such as choosing the gender of a child or cloning humans are seen as universally wrong in NZ and should be acknowledged by scientists. "It feels like they are playing god, messing with nature", said one respondent. Also, many believe that scientists are probably involved in research method they wouldn't actually support. "If they tell us too much, people will think...hell I don't like the sound of that, when in fact it's in our own best interests", stated one respondent. Many

The mainstream group, missing from most science to the public

Contributing to science debates

the personal efficacy to feel empowered and make choices (e.g. cellphone technology).

In terms of dialogue, science needs to move from a high ground of intellectual expertise to more accessible public position, as currently science is seen as trustworthy, but separate and elitist. Dialogue needs to be two way, and equal, as scientists needs to actively listen, and have more open discourse. Scientists might better take the role of a moderator/facilitator, rather than the 'lead act'.

Basic communication principles should prevail, so that language needs to be accessible to Mainstreamers, and most efficacious approach is to be gained through talking to the 'portals of interest'. In particular Mainstreamers are most likely to feel able to actively contribute around applied science/technology compared to pure science. Populist science does have a place to actively engage with people, communicating pathways of accessibility and interest, particularly when this is based in everyday, 'the world around me' science.

Also important would be providing accessible personalities and identities that Mainstreamers can relate to 'people somewhat like me'. In addition using strong personalities has an important role, in providing an identifiable human face and personality to the science brand, and acting as a communication 'bridge' that builds connections with Mainstreamers.

The most important issue is likely to be, however, that the public mindset of dialogue is about ensuring the views of

scientist prevail. So it should be demonstrated that the public discourse is based on truly open dialogue and willingness to incorporate public opinion, rather than the science objective to gain public 'buy in'.

Applied science and technology has a key role to play in closely the gap between science and the public, as it is the more accessible and tangible side of science, and easier for the mainstream to see the relevance. Key to consider is the more disengaged youth, so will their engagement with science grow as they mature and experience life?

For older people, having children and exposure to serious illness certainly seems to bring them closer to science.

A further question, is Gen Y fundamentally different to Baby Boomers and Gen X? How these different generations consume information is likely to differ. For example, younger people show with greater reliance on the internet and social networking. Twitter and Facebook both provide opportunities to provide more targeted information to individuals who have



The mainstream group, missing from most discussion on how to connect science to the public. Photo (4).

chosen to follow something or have joined a group on Facebook.

Relevance Checklists

Communication about science should tick at least one of the following factors:

- Does it have a health impact?
- Is it a topical or controversial issue?
- Does it align with my personal interests?
- Is it relevant for my country?
- Does it impact future generations?
- Does it have a financial impact?
- Is it present and visible in our day to day lives?

Also, use of multiple factors is more likely to generate interest from the mainstream.

Engage with the public at an early age

Science needs to look at ways to foster and grow early childhood interest in science, when children are asking the 'why' questions. Unfortunately the school system isn't always achieving this, so many drop out and become isolated from science at an early age – as it becomes too academic for the mainstream. Subsequently science can be forgotten and pigeon holed as 'not for me'. The challenge is to consider ways of keeping children engaged in some form of science throughout their education and into adulthood, to keep the curiosity spark alive. Science should consider promoting more accessible careers that use applied science such as nursing, police, technology, engineering in addition to pure scientist roles.

Farmers: an engagement model?

Farmers were by the far the most knowledgeable segment of Mainstreamers, as farmers tend to focus on agricultural science which impacts them directly and is an essential part of their business. Farming is a specialist area that requires an understanding of science to function. So there is a business need to drive uptake and implementation of science, which is used every day on the farm.

Farmer representative groups ensure farmers feel well represented, engaged and consulted. Also farmers who are part of R&D agencies directly contribute to science and are kept informed by company of results, through percentage of earnings. Australian farmers have access to eight different rural R&D Corporations, based on specific industry areas, such as Dairy Australia Limited and the Grains R&D Corporation (2). In New Zealand farmers can take part in the Primary Growth Partnership initiative through their rural industry companies, such as Fonterra for the dairy industry (3). Science communication in rural industries shows some useful model processes in terms of ways to drive public engagement, consultation and empowerment.

Conclusion

The challenge is for science to enter the mainstream world, both in targeting audiences and the use of modern communication approaches and technology. Science must not expect the mainstream to enter the world of science. Mainstreamers need to have entry points rebuilt for them, to

feel they are both welcomed to re-enter a science world, and to see some reason or benefit in their engagement.

References

1. Nielsen, 2010. Understanding Public Perceptions of Science. A presentation on qualitative research carried out for the Ministry of Research, Science and Technology, New Zealand.
<http://www.msi.govt.nz/assets/UnderstandingPublicPerceptionsofScience.pdf>
2. Rural R&D Corporations, Australia.
<http://www.ruralrdc.com.au/Page/About/Rural+RDCs.aspx>
3. Primary Growth Partnership initiative, New Zealand.
<http://www.maf.govt.nz/agriculture/funding-programmes/primary-growth-partnership.aspx>
4. http://beforeitsnews.com/story/1472/186/Military_Detection_Versus_We_the_People..._we_the_what_people.html

Continued from page 8.

various teaching focus areas, for example - ESL/science, ICT/science, Literacy/science and important primary/secondary connections.

The appointment of our new Science Consultant K-12 has generated a greater interest in science within the broad curriculum. School uptake of the programs and initiatives which have been developed over the past 12 months has increased rapidly. The teacher professional learning programs have included:

New Syllabus workshops: five primary schools and six high schools have commenced to engage with the Australian Curriculum and the draft NSW Science Syllabus through workshops or projects..."

Dr Lambert claimed at a school public event that this approach was making inroads to effective science education contrary to trends reported elsewhere in the school systems around Australia.

Science challenges the conservative mind

To end this report I want to advance another frame or framework to view or interpret media items about science (to expand in future media reports). That is, the notion that science is fundamentally "progressive" and challenges the conservative mind. Thus we can recall that President GW Bush is known as one of the most anti-scientific US leaders of American history. Again, the right-wing libertarians oppose or resist the collective action implications of the scientific conclusion of human induced climate change by attacking the science because it asserts a truth and policy implications which conservative ideology finds terribly inconvenient. So science is deeply "political"! We all can't help being like Galileo or Charles Darwin.

Poronnik's Points

NOTICES TO MEMBERS FROM
THE HON. SECRETARY



ANZAAS Council

To contact either the council,
your local representative on

the council or your local
committee please contact
either me, our Hon secretary,
or our Chairman, see below

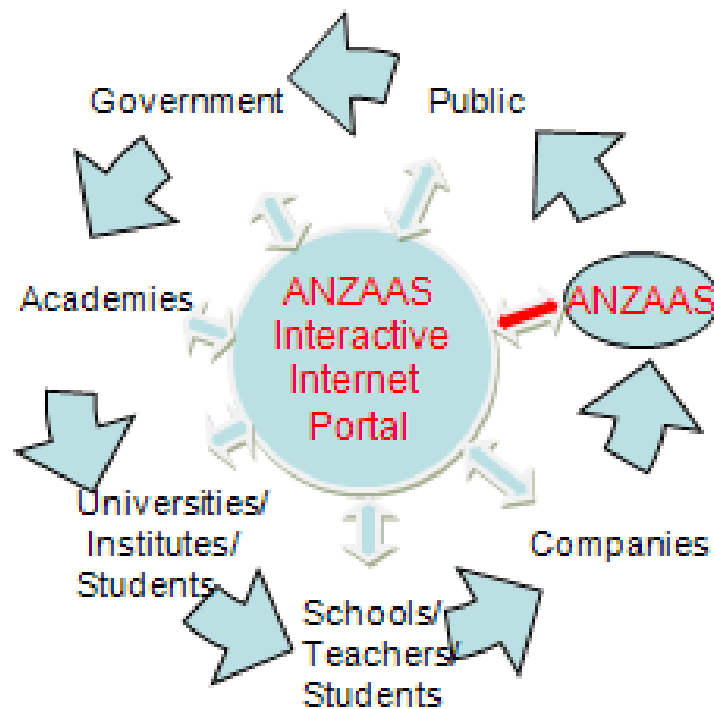
Honorary Secretary

Professor Philip Poronnik
School of Medical Sciences
RMIT University
Tel: (03) 9925 7071
E-mail: secretary@anzaas.org.au

Chairman

Dr Malcolm S. Jenkins
10 Bellbird Road
MT ELIZA
VIC 3930
Tel: (03) 9787 7968
E-mail: malcolmjenkins@bigpond.com

ANZAAS completes a Virtuous Circle of Connectivity



By Victor BIEN

The Scientific Imperative



Most of these items I report on here came through ABC Radio National, which has a new more finely honed program line up for 2012. I heard an interviewee say in relation to media coverage "... with the exception of ABC RN..." So perhaps something objective has happened albeit limited to one outlet.

Richard Dawkins

In early January a new book for school education children was published. It is entitled *Magic of Reality: How We Know What's Really True*, by Richard Dawkins. Dawkins is now well known for advancing atheism. One of the things about people's tendency to believe all sorts of things including unprovable religion which bugged Dawkins was that so many people pine for the wonders of the supernatural realm to escape the travails of the material world. It dismayed him because he was incredulous that such people apparently could not see the wonders of the material world as revealed by science. I think a standout incident was when Federal MP Julie Bishop asked Dawkins a couple of years ago on the Q&A show or something similar, "is this all there is?" with a sense of dismay under the impact of Dawkins' demolition of supernatural belief. Dawkins was staggered by that question; at the obvious abysmal lack of real appreciation of the scientific view of the world. That incident must have been a big spur on Dawkins to write this new book. It is billed for readers from 11 to 100!

On 8 February ABC Radio National Breakfast carried an episode about society's deep-in-the-bones cultural attitude to maths ability. You can download the podcast from <http://www.abc.net.au/radionational/programs/breakfast/2012-02-08/3817524>.

Divide between Science and Arts

Despite CP Snow's book, *The Two Cultures*, published in the 50s the gulf between the two cultures seems as wide as ever! (You can listen to Ann Moyal talking about interdisciplinary approaches which includes a brief recount of the book on ABC RN Ockham's razor episode on 26 Feb). What came across in the breakfast program was that maths and numeracy at the deep emotional level is regarded as external or not "internalised" in almost total contrast to literacy and literature which are deeply internal or deeply part-and-parcel of who and what we are as social beings. Since maths is central to science, that makes science external to the bulk of the educated mind. So I don't think the problem for science is one simply of inadequate scientific literacy. I think the problem is a sort of alienation from science in the bulk of the educated mind [about this issue also see the special report on page 4].

ABC RN Big Ideas program *Geeks, Freaks, and Eggheads* on 17 Nov centred on a discussion about how to convey science to the public. I was appalled by the program in how *déjà vu* it was for me. It was as if the art of the advocacy of science has not advanced one iota since 1982 when Barry Jones wrote *Sleepers Wake!* I gave the producer of the program a piece of my mind along that line. So if you go to the discussion section of that episode you'll see what I posted.

Two items, which obtained media coverage because they connected with deep human interest, were that on 3 Feb ABC RN Breakfast news summary James Carlton played a clip of a brain waves decoded by a couple of scientists which came across as recognisable music which the test subject was either hearing or was thinking about! The other big new item was the Square Kilometre Array not only for its touted scientific promise to be able to listen or see to very close to the beginning of the big bang but also for Australia's standing in the international world of science. At this writing it seems that Australia will lose out to South Africa.

Poor student interest in science

However, as spectacular as these science news are I doubt it would have much effect on the problem of the lack of students choosing science as a career. The problem causing this situation is as depressing as is the above news is exciting. On the depressing side the dysfunction of science teaching in schools is many faceted guaranteeing large numbers of primary kids, kids in their most formative years, are not getting the desired stimulus and inspiration to pursue science; the lack of clear views of what sort of employment future exists if one does train in science would be the major cause of the very poor to alarming enrolment numbers in high school.

The agenda and orientation of the media doesn't help with the promotion of science but occasionally something breaks through. During the height of the Kevin Rudd challenge to the Prime Minister Julia Gillard, Simon Crean, who initially complained about the failure of the media to cover the things they (the Labor Government) were achieving, gave a turn of discussion led by Fran Kelly, the compere of ABC RN Breakfast, 28.02.12, to speak about what positive things Labor was achieving and what he conveyed was of interest to us scientists.

Back to school

Within this generally depressing state of the stocks for science there are effective things happening. In my role as an activist promoting public education I came to know what one 'Regional' director of school education in NSW, Dr Phil Lambert, Adjunct Assoc Prof, Univ Syd, has done in the last couple of years to promote science education.

Two years ago the Sydney Region director conducted a forum for Science Head Teachers to discuss trends regarding Science teaching and learning in our secondary schools. The forum and follow-up data provided the impetus for the Region to develop several specific strategies for our 2011-13 planning cycle. These included: recruitment of a Science Consultant; providing long term projects, specific workshops and school-based professional learning support in science K-12; strengthening existing high school science networks, and developing new networks for primary teachers; developing materials for the Sydney region website to provide easy access for schools e.g. Science Support Blog is up and running to support teachers from K-12 <https://wwwv.det.nsw.edu.au/blog/9896-srsciencesupport/>; Wiki: Sydney Region Science Support Wiki is up and running to support teachers from K-12 <http://sr-science-support.wikispaces.com/>; development of Professional Learning projects and workshops for science education: exploring Industry partnerships and other external agency relationships (Energy Australia, Sydney Water, Caltex, universities) with the intention of coordinating a Science Expo and drawing on the considerable public and corporate science resources in the Region; and making explicit the links between

(continued page 6)