

GENERAL MEETING

Old Church Rooms on Monday 11th February 2019 at 7.30pm

Present: David Silver [Chairman], Nick Hawkins (Secretary), Ellis Jenkins (Treasurer), Bob Roberts, Ian Thomas, Cllrs Helen Lloyd Jones, Huw Jones, Rod Mckerlich and Ralph Vaughan, and 35 members.

Apologies: Tom Evans [Vice Chairman], Eric Blackwell, David Cargill, Allan Cook, Raymond Rivron, Cllr David Suthers, Peter Sharp.

Introduction

The Chairman welcomed everyone to the meeting.

Colin Johnson: ‘Science meets the public, and vice-versa’.

The Chairman introduced Colin. Since graduating in chemistry from Oxford, he had spent his working life in science education - first as a schoolteacher, then as a university lecturer, and latterly in the informal education sector. He joined the Techniquest project and was chief executive from 1997-2004. In retirement he had been active in the field of 'public engagement with science' as a mentor, and a consultant. He received the OBE in 2004, for "services to science", both nationally and internationally. He is an honorary Fellow of the British Association for the Advancement of Science and, in 2011, was made a Fellow of the American Association of Science and Technology Centers - the first British person to receive this international award which was introduced in 1974 and has been given to just 35 individuals since then.

Colin started his talk with a 50 year old quote “The general public has long been divided into two parts; those who think that science can do anything and those who are afraid it will.” In his view, that was still the case, although today we know more about public attitudes to science. Only the previous month it was said that “The word ‘chemistry’ still has just about as much resonance with the public as ‘annual tax return’”. For a number of years he had been involved in lots of ways that science has been shared with the public and he wanted to use a few projects to illustrate some very different approaches to this challenge.

CommQuest -Techniquest In 1999 Techniquest was invited to provide an exhibition in Durban, South Africa, as a public attraction alongside the Commonwealth Heads of Government Meeting (CHOGM). They agreed to do so on condition that they could organise an educational tour that shared this effort to the people around the country that could really benefit - they didn't want simply to be hired for a VIP event. So they took a group of around 20 of Techniquest's exhibits) to five venues around the country, once the CHOGM had finished. In this way they reached 52,000 people, and 19 members of the Techniquest staff took turns to do a three-week stint looking after it and running science shows in schools, museums and shopping malls. At the end of this time the exhibits were bought by the S African government and made available on loan to other museums and centres. Twenty years later, the exhibition is still available under the name Sci-Quest!

Research Councils .. Liverpool John Moore's University He explained that researchers in science and engineering get much of their funding from the government's Research Councils based in Swindon. The Astronomy group at Liverpool John Moore's University has a bit of a track record in unusual ways of explaining their work - one of which is to incorporate their ideas in the design of gardens. In 2015 they succeeded in getting a spot at the Chelsea Flower Show, and applied to the Research Councils for money to produce a garden to illustrate 'Dark Matter'. Two months from opening, they needed raise more money and asked for Colin's help. He went back to the sponsors and said “this is a great project, but you need to find them enough money to do it properly” - and they did. As a result, the team not only won a gold medal, but also best in class!

Black Sea Marine Archaeology Project - Southampton University This was an example of getting disadvantaged children involved in science. The project involved the analysis of anaerobic mud at the bottom of the Black Sea and, among the discoveries is the world's oldest complete shipwreck - and it looks exactly like one pictured on a Greek vase from 475 BCE! Colin's involvement was to help with interviews of the Y12 students whose schools had nominated them for possible participation in the project. It was particularly interesting because the schools had been asked to put forward students with promise, but whose circumstances were unusually problematic - e.g. caring for a relative, even one asylum seeker.

Bloodhound - setting a new world land speed record (Swansea University and many other partners) Colin explained the background to the project, which has been much in the press. His role was to support Ben Evans (an engineer with expertise in the area called computational fluidic dynamics) in some of the ideas he had for the educational side of this project, links with schools and the science curriculum etc; essentially inspiring the engineers and scientists of the future.

Periodic Table of Videos - Nottingham University Another fascinating project, involving a fascinating man - Prof Martyn Poliakoff. It concerns the creation of a YouTube channel which contains videos describing all the elements - often featuring the Professor. Colin's role was to act as project mentor - a requirement because part of the work was funded from Swindon. Its success can be judged by the fact that the channel has been viewed 120 million times, and has more than 700,000 subscribers! (Secretary's Note: If you would like to see the videos, follow this link: <http://www.periodicvideos.com>)

Two new Museums - Musée des Confluences (in Lyon, France) and Esplora (a science centre in Malta) Both museums are situated in stunning locations and demonstrate how cleverly science can be made understandable and approachable to the general public. Colin's role was again to provide guidance on what would work best in the two locations, including the suggestion (for Esplora) that the venue should include a planetarium! It also includes a full length walk-on piano - an idea adopted by Technquest 15 years ago.

Technquest - the Science Capital Colin spoke a little about the future of Technquest. For the first time since he retired there is going to be a major investment in Technquest, which involves building a two-storey extension at the eastern end. This will provide a whole new chunk of exhibition space, and an opportunity for them to spread their wings in other ways. He hoped this will happen. One of the enduring problems of science centres around the world is that, on the whole, science museums and science centres are for "people like us" - the suburban family with a car, that is more likely to shop in Tesco than in Priceright, and that thinks it is important to give their children lots of formative and educational experiences when they are young. On the other side of the tracks, so to speak, are households of a very different kind where families don't do these sorts of things together. On the whole, it's not because they can't afford to do them, it's that they see these facilities as having been provided for people who are different from them. Technquest's aim for the coming years is to engage more effectively with these people, in the name of social justice and equal opportunity for all.

Colin also asked the question "Why do scientists do this sort of thing?" He gave four reasons:

- 1. Economic and practical** -Bringing forward the scientists and engineers of the future, by supporting the work of teachers and students
- 2. Cultural and social** -Science is part of our shared culture, and sharing science supports the scientists' "licence to practise"
- 3. Utilitarian and educational** - Empowering people with knowledge, skills and understanding that they can use in their everyday lives
- 4. Democratic and inclusive** - In the interests of democracy and social justice, knowledge and understanding should be available to all. Democracy is better served by an informed public.

There was only one question for Colin at the end of his talk - what new project would he like to see in the future? His response was 'one that cracked the Arts/Science divide'.

At the close of the talk, the Chairman thanked Colin for giving such and interesting and informative talk. He felt that Colin had not only amply demonstrated why scientists did the type of thing he had described but also how advisors like him were so crucial to a successful outcome. He gave him a token of the Association's appreciation.

Minutes of the previous General Meeting on 19th November 2018

The minutes were approved. There were no matters arising.

Treasurer's Report

The Treasurer reported that the Association's accounts for the year ending 31st December 2018 were still in preparation but, subject to audit, the Association had a deficit of just £70 over the year and the end of year reserves stood at £6625; a very satisfactory position. There were no questions.

Entertainment

Ian Thomas informed the meeting that he had taken over responsibility from Eric Blackwell for running the RMA Film Club and he thanked Eric for all the hard work he had done. He mentioned the two films that remained to be shown in the current season ('*Mama Mia, Here we go Again*', **Thursday 28th February** and '*Bohemian Rhapsody*', **Thursday 28th March**) and also said that a Charlie Chaplin Film '*The Kid*' would be shown during the May Festival.

Ian said that he intended to set up an active Film Club Committee that would be involved with choosing films and also improving the whole viewing experience. He invited anyone who might be interested to get in contact with him.

The Secretary mentioned that the Amici Choir (a subset of Cantemus) would probably be performing at the final Charity Concert at the end of the May Festival. There would be an early opportunity to hear Amici at a concert in Christ Church on the coming Friday, **15th February**, starting at 7.00pm. The concert had been organised by the Parish of Radyr to thank the clergy who had assisted since the retirement of Rev Jenny Wigley, but everyone was welcome. Tickets, £5 including refreshments after the concert, will be available on the door.

May Festival 2019

The Chairman informed the meeting that 32 of the 33 events in the Programme had now been fully confirmed and the brochure would be distributed in the next edition of Radyr Chain. All details would also be in the Festival Website, www.rmfestival.org.uk.

General R&M Matters

The Chairman repeated his appeal in the last Association Newsletter that a lot of local organisations (including the Association) are looking for new members and new ideas. The Association would appreciate help with any events, either in the planning or hands on at the event itself. The Secretary added that one problem with many organisations was the lack of engagement with a younger generation - notably those in their 30s and 40s. If that generation does not get involved in current activities then it is inevitable that the present richness of societies in R&M will wither. So new people helping is one aspect, creating new activities to appeal to the future population of R&M is an equal challenge. All ideas gratefully received!

Next Meeting

The next meeting will be on Monday, 15th April 2019 commencing at 19.30 in the OCR. This will be the Association's AGM and refreshments will be offered after the formal proceedings.