



Bulletin Issue 10 July 2013

Editorial

The publication date for the Bulletin will change from May and November to July and January. This should enable a better reflection on the year's events and will also give members a chance to submit reports on any of the lectures they attended at the Cheltenham Science Festival.

We ended what has been an excellent academic lecture season with a highly entertaining tour-de-force by Professor David Philips. Thanks go to Geoff Lubbock for organising the speakers and we look forward with interest to the coming season.

On behalf of the members we thank Richard for his three years as Chair of the Society and wish him a happy "retirement" as he hands over to Michael McEllin.

Members

We welcome the following members who have joined the Society Chris Harmer, Arthur Lees, Edward Glennie, Roger Armitage, Victoria Herrington, Geoff Knight, Ian Hunter, Tony Cima, John Sawyer, Roger Abraham, Helena Abraham, Lance Osborne, David Burford, Valerie Burford, Hayley Butcher, Colin Watts, Roy Brocklehurst.

News/Comments

The Cheltenham Science Festival ran from 4 – 9 June. It appeared to have been well attended and gave ample opportunity to hear outstanding speakers as well as providing entertainment and education for school children. This year's guest directors were Wendy Hall, David Willets and Dara O Briain and major names included James Watson and Peter Higgs.

Personal highlights were Professor Nancy Rothwell discussing the latest research on strokes, Ron Lancaster demonstrating (quite noisily) how modern firework effects are achieved and the discussion about Richard Feynman between James Gleik (his biographer), Christopher Sykes (who produced the Horizon programmes on Feynman) and Robin Ince (who was inspired to take up science by Feynman's work). The talk entitled "Can we trust climate change models" was disappointing in that it produced the predictable stalemate between the climate scientist (Tansin Edwards), the sceptic (Jonathan Jones) and the policy advisor (Claire Craig) with all three effectively sitting on the fence.

The Cirencester Science & Technology Society Prize for Commitment in the Scientific Field at the Cirencester Academy in 2012 was awarded to Tom Dack.

His citation read: "Tom is a very keen student which is reflected in the many ambassadorial roles he has undertaken during his time at College. He could be relied on to provide honest and considered opinions to future students. His interest in Science, particularly Physics and Maths, always led to challenging and informative discussion and it was rewarding to watch him develop his understanding. He is now reading Physics at university and I am sure his questioning nature is thriving in this new environment."

Visit Reports

Congratulations to Bunny Lee Smith and Herbert Mould for arranging the visits programme.

29 members visited International Air Salvage (IAS) at Kemble on the 1 March and lunched afterwards at the AV 8 restaurant. IAS is not just a breakers yard but a high tech operation which trace and authenticate the complete life history of each component before it can be sold to airlines.

1 May was the visit to Hinckley Point Power Station. If you believe you learn from your mistakes, this visit was very educational !! Only 11 of the original 20 interested members turned up, we got lost in Bridgewater and we were unable to visit the Reactor Hall as we did not have the necessary security clearance. Remarkably the day was very enjoyable and lessons have been learned. This is perhaps just as well as 17 of us, complete with security clearance will be going again on 20 August.

12 members visited Culham to see JET, the world's largest tokamak and Mast, the spherical tokamak. We were all impressed not just by the science but also by the smooth reception through security.

The 17 August has finally been agreed as the date for the visit to Flatholm. There are still places available so please contact Herbert.

Tailpiece

Given the continued debates over Britain's energy policy and the role of nuclear, it is thought provoking to read the following quotations from some of major early researchers.

"There is no likelihood man can ever tap the power of the atom. The glib supposition of utilizing atomic energy when our coal has run out is a completely unscientific Utopian dream, a childish bug-a-boo. Nature has introduced a few fool-proof devices into the great majority of elements that constitute the bulk of the world, and they have no energy to give up in the process of disintegration".

- *Robert A. Millikan 1928 speech to the Chemists' Club (New York)*

"...anyone who expects a source of power from the transformation of these atoms is talking moonshine..."

- *Ernest Rutherford 1933*

"There is not the slightest indication that [nuclear energy] will ever be obtainable. It would mean that the atom would have to be shattered at will".

- *Albert Einstein, 1932.*

~Perhaps the last word should go to Richard Feynman (1918 – 1988). “If you thought that science was certain – well that is just an error on your part”.