



An interview with Colin Humphreys

Professor Colin Humphreys is Goldsmiths' Professor of Materials Science, University of Cambridge; Professor of Experimental Physics, The Royal Institution; Professorial Fellow, Selwyn College, Cambridge; past-President, Institute of Materials, Minerals and Mining; Chairman, International Advisory Board, National Institute of Materials Science, Japan; Director, Rolls-Royce University Technology Centre on Advanced Materials, Cambridge; and Director of the Cambridge - Thomas Swan Centre for Gallium Nitride. He is very involved in publishing and lecturing on science and religion, and was chairman of Christians in Science from 1994-2001.

What have you been doing until now?

After my degree in Physics at Imperial College, I went to the Cavendish Lab in Cambridge where I completed a PhD in Physics. I moved to Oxford and became a lecturer in the Materials Science Department, and from there to Liverpool where I was head of the Materials Science Department. I have been in Cambridge since 1990.

Who have been the most important role models in your life?

In terms of Science and Christianity, the books of Donald MacKay were very helpful, especially when I was at a formative stage. There wasn't much written on science and Christianity from an evangelical viewpoint when I was at University. John Polkinghorne and Oliver Barclay's writings have also been very helpful.

What do you do for fun?

I enjoy travelling, which is a good thing because I spend a lot of time travelling around the world with work! In my spare time I write on science and religion. I have written papers in scientific journals on the date of the Crucifixion, the Star of Bethlehem, etc. My first book was on "The Miracles of Exodus", and my current project is a book on the last week of Jesus' life.

What challenges have you come across as a Christian and a scientist?

I was brought up with a young earth creation viewpoint. This made biology lessons at school more exciting, with all the questions that I, and a friend who came from the same background, were asking! When I went to university I saw the evidence for an old earth, and although I stayed in science, this was a shock to my faith, because so much of it was based on this interpretation of Genesis rather than the gospels.

Also, I have more recently noticed a trend, mainly among biologists and people working on the more sociological side of biology. They are nervous around evangelical Christians, and surprised when they agree with them – for example on the petition from evangelical leaders in the USA urging action on climate change.

How has your faith helped you as a scientist, or vice versa?

My faith has helped me more as a person than in my science, although it does motivate me to look for practical applications in my work. My work on photonic materials has led me to work on the development of LEDs, that if used to replace lighting in homes etc should reduce CO₂ emissions from power stations by about 15%. We are also working on a solution to the lack of clean drinking water in developing countries, by using UV sterilisation. In an unusual way my science helps my faith, when I read the Bible with my scientist's "hat" on. My work on the miracles of Exodus, which I wrote as a scientist looking at the Bible objectively, is an example of this. My current writing on the last week of Jesus' life has involved a lot of work on different ancient Jewish calendars, which were based on astronomy, to address the apparent discrepancy between the gospels regarding whether the Last Supper was a Passover meal or not.

What question would keep you debating till four in the morning?

At the moment, a debate over ancient calendars! Also issues of global warming, and whether we are going to be able to make a difference.

If you weren't a scientist what would you be?

That's hard to say – I wouldn't mind being an archaeologist, reconstructing the past. I wonder if I would become a scientist if I was at school now? I hope so, because science has given me many challenges and much pleasure. However, in the UK, scientists have been given a bad "geeky" image, and people who do well at school seem to be encouraged to do other things, so I might have ended up working in the City!

[However Prof. Humphreys has been doing what he can to encourage children to take up science, having been invited to give public and schools lectures in Australia and Singapore. In the UK he has been President of the Physics Section of the BA and Fellow in the Public Understanding of Physics of the Institute of Physics and has given talks to many thousands of school pupils and teachers.]