



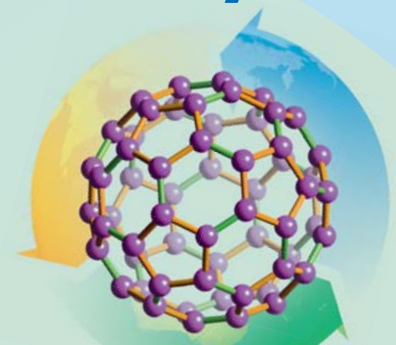
Science, Society and Sustainability

Sir Harold Kroto

The Florida State University
Nobel Laureate in Chemistry

7 Jan 2010 (Thu) 2:00 - 3:30 pm

Lee Wing Tat Lecture Theater (LT-D), HKUST



Abstract

Science, Engineering and Technology (SET) have revolutionised our world; so much so that few in the developed world have the slightest idea of what it was like in previous times when most worked 12 hours-a-day, 7 days-a-week just to survive, and half of all children died by the age of 8. Control of power, food supply and disease has changed all that and in the last century we saw advances such as lasers, computers, informatics etc change all aspects of work and play. As the 21st Century unfolds an intrinsic chemical perspective is transforming physics, materials science and biology. Bottom-up self-assembly techniques promise to improve energy efficiency, simplify industrial production, revolutionise technology and medical science and open up unforeseen exciting new horizons. The approach is not new – it is as old as chemistry and the origin of life – but it has acquired a new name: NanoScience and NanoTechnology (N&N).

All technologies have the capacity to benefit society or to be detrimental and so as powerful new technical advances arise there is an onus on everyone to understand some important SET factors. As our modern world is so completely – and precariously – balanced on SET, an understanding of these disciplines by all in positions of responsibility is vital. Although wise decision-making may not be guaranteed by knowledge, common sense suggests that wisdom is an unlikely consequence of ignorance. Education is certainly a key factor and the Internet must be harnessed to improve matters. With the Vega Science Trust, (www.vega.org.uk) an exciting new Global Educational Outreach for Science Engineering and Technology initiative (GeoSet, www.geoset.info and www.geoset.fsu.edu) we are now working with other Universities to make outstanding educational material available on the Internet in any part of the world.

About the Speaker

Sir Harold Kroto received his PhD in molecular spectroscopy in 1964 at the University of Sheffield, UK. Before joining the Florida State University in 2004 where he is the Francis Eppes Professor of Chemistry, Sir Harold taught at the University of Sussex for 37 years. He received the Nobel Prize in Chemistry in 1996 for his co-discovery of buckminsterfullerene, a form of pure carbon better known as “buckyballs”.

An ardent advocate for science education, Sir Harold devotes much of his time and energy to promoting careers in science among young people. In 1995, he launched the Vega Science trust to create television and Internet programs to improve public awareness and understanding of science and engineering. The following year he was knighted for his contributions to chemistry. In 2001, he won the Royal Society's Michael Faraday Award for his furthering public communication of science, engineering and technology in UK. Sir Harold has received honorary degrees from a number of universities in UK and abroad, as well as many scientific awards. He was elected a fellow of The Royal Society and member of Academia Europaea.