



Cambridge Society for the Application of Research

Churchill College
Storeys Way
Cambridge
CB3 0DS

“The Grand Challenges and Accomplishments of Engineering Research”

Attracting Bright Young People to
Engineering and Science Research

Professor Lord Alec Broers Kt FREng FRS ScD(Cantab)

7.30pm, Monday 17th February, 2014
Wolfson Hall Lecture Theatre, Churchill College
Storey's Way, Cambridge

The Lecture:

The Royal Academy of Engineering (RAE) has recently predicted that by 2020 there could be a shortage of 360,000 STEM graduates in the UK.

Shortages have also been forecast for the USA by the National Academy of Engineering (NAE) and it has been reported that China is seeking 25 million engineers by 2020.

This talk will describe the background to two international initiatives aimed at addressing this issue and increasing the world-wide supply of STEM graduates, especially engineers. The first is the Global Grand Challenges Summit that was devised by the RAE, the NAE and the Chinese Academy of Engineering (CAE) and held for the first time in London in 2013.

The Summit grew out of the NAE's Grand Challenges for Engineering project that identified 14 grand challenges for engineering in 2008. The next Summit is to be hosted by the CAE in China in 2015.

The second initiative is the international £1 million Queen Elizabeth Prize for Engineering, launched in 2011 by all three political parties in the UK and funded by the private sector. Her Majesty gave her name to the Prize, and presented it to the first winners in Buckingham Palace in June 2013.

About the Speaker:

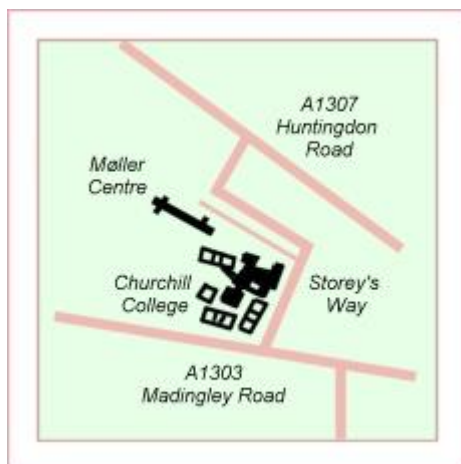
Professor Lord Alec Broers Kt FEng FRS ScD (Cantab) is a specialist in nanotechnology and microelectronics. He worked for IBM in the USA for nineteen years before returning to Cambridge University. Here he subsequently became Master of Churchill College, Head of the Engineering Department, and Vice Chancellor.

He was President of the Royal Academy of Engineering and Chairman of the House of Lords Science and Technology Select Committee. He now chairs several boards, including those for the Diamond Light Source, the Knowledge Transfer Network for Transport, the House of Lords All-Party Parliamentary Group for Engineering, the Cambridge China Development Trust, and the Judging Panel for the Queen Elizabeth Prize for Engineering.

He is a Sir Louis Matheson Professor at Monash University, a founding Trustee of the American University of Sharjah, and this year is president of the Smeatonian Society of Civil Engineers.

Lord Broers is a Foreign Member of the Chinese Academy of Engineering, the Australian Academy of Technological Sciences and Engineering and the (US) National Academy of Engineering. Most of his present activities are in support of state-of-the-art engineering and applied science research, and in attracting the world's brightest to these activities.

Practical Matters



Those attending the CSAR lecture may park in the Senior Car Park on Churchill Road, which is off Storey's Way. More parking is available further along Churchill Road, and in the Möller Centre at the far end.

CSAR lectures are open to all; CSAR members are admitted free. Pupils and students may register for free membership at the lecture reception desk.

Non-members are asked to make a nominal contribution of £3.00.

Coffee and biscuits are available in the Wolfson Foyer from around 7pm. For further directions, see: www.chu.cam.ac.uk/about/visitors/directions.php