

# PROFESSOR SIR COLIN HUMPHREYS

CBE, FEng, FRS, Hon DSc, FIMMM, FIP, FCGI, FRMS

Department of Materials Science and Metallurgy, University of Cambridge, 27 Charles Babbage Road, Cambridge, CB3 0FS

Tel: +44 (0)1223 334457, e-mail: [colin.humphreys@msm.cam.ac.uk](mailto:colin.humphreys@msm.cam.ac.uk)

---

## PERSONAL DETAILS

**Home Address:** 8 Diamond Close, Cambridge, CB2 8AU **Tel:** 01223 365725 **Mobile:** 07743 324304

**Nationality:** British, Married, 2 children

---

## EDUCATION

1952 - 60	Luton Grammar School
1963	BSc. 1 <sup>st</sup> Class Honours in Physics at Imperial College, London
1967	PhD in Physics at University of Cambridge
1968	MA, University of Oxford

---

## CURRENT POSITIONS - UNIVERSITY OF CAMBRIDGE

2008 - present	Director of Research, Dept. of Materials Science and Metallurgy, University of Cambridge
1994 - present	Director, Rolls-Royce University Technology Partnership in Advanced Materials
2000 - present	Director, Cambridge Centre for Gallium Nitride
1990 - present	Fellow, Selwyn College, Cambridge

---

## RESEARCH INTERESTS

Electron Microscopy and Analysis  
Semiconductors (particularly gallium nitride)  
Ultra-high temperature superalloys for aerospace applications  
The chronology of ancient historical events

---

## HONOURS AND AWARDS

2013	Platinum Medal, Institute of Materials, Minerals and Mining
2011	Fellow, City and Guilds Institute
2011	Fellow, The Royal Society
2010	Knighted for Services to Science
2008	Establishment of the Colin Humphreys' Education Award by the Institute of Materials, Minerals & Mining (in recognition of Humphreys' work in promoting science in schools. Awarded annually for outstanding work in promoting science to the 11-19 age group)
2007	Fellow, School of Engineering, University of Tokyo (first year of the Awards)
2006	Commemorative Plaque, China Distinguished Materials Scientist Lecture, Beijing
2003	Commander of the Order of the British Empire (CBE)
2003	Robert Franklin Mehl Gold Medal, The Minerals, Metals & Materials Society, USA
2001	Hon DSc, University of Leicester
2001	European Materials Gold Medal, the premier award of the Federation of European Materials Societies
1999	Kelvin Medal and Prize, Institute of Physics
1996	Elegant Work Prize, Institute of Materials
1994	Fellow, Royal Academy of Engineering
1994	Freedom, City of London
1991	Member, Academia Europaea
1989	Rosenhain Medal and Prize, Institute of Metals
1963	Royal Society of Arts Silver Medal

---

## NAMED LECTURES

2013	Armourers and Brasiers Kelly Lecture, Cambridge
2012	Finniston Lecture, IoM3, London
2012	Winegard Lecture, Guelph and Toronto Universities, Canada
2011	John Cowley Distinguished Lecturer, Arizona State University, USA
2010	Sir D. Owen Evans Memorial Lecture, The University of Wales, Aberystwyth
2008	IEEE Distinguished Lecture, Indian Institute of Technology, Mumbai
2008	Golden Jubilee Oration, Defence Research and Development Organisation, Delhi
2002	Robert Warner Lecture, Founders' Company, London
2002	John Matthews Memorial Lecture, Durban, South Africa
2001	Royal Academy of Engineering Sterling Lecture, Singapore and Malaysia
2000	Hatfield Memorial Lecture, University of Sheffield/Royal Society/Institute of Materials

## NAMED LECTURES

---

1999	Gladstone Lecture, European Physical Society, London
1997	Hume Rothery Memorial Lecture, Oxford
1993	DKC MacDonald Memorial Lecture, Toronto, Canada
1989	Reginald Mitchell Memorial Lecture and Medal, Stoke-on-Trent

## CURRENT POSITIONS - *EXTERNAL*

---

2013 - present	International Scientific Advisory Panel, Monash Centre for Electron Microscopy, Australia
2012 - present	EPSRC Advanced Materials Working Group
2012 - 2014	International Science Advisory Board, Photon Science Institute, University of Manchester
2011 - present	Tribology Trust Awards Committee
2010 - present	Royal Society's Research Appointments Panel A(ii) (Chairman, 2013-present)
2010 - present	External Advisory Board, SSLS EFRC, Sandia National Laboratory, USA
1999 - present	Professor of Experimental Physics (Honorary), The Royal Institution, London
2007 - present	Board of Stakeholders, EU Technology Platform Photonics 21
2008 - present	International Review Panel for Japan World Premier Research Centre Initiative (WPI)
1997 - present	Liveryman, Worshipful Company of Goldsmiths
1994 - present	Trustee, Link House, Cambridge
2005 - present	Court, Worshipful Company of Armourers and Brasiers

## PREVIOUS ACADEMIC POSITIONS

---

1990-08	Goldsmiths' Professor of Materials Science, University of Cambridge
2000-05	Chairman, Faculty Board of Physics and Chemistry, University of Cambridge
2002-06	Chairman, Promotions Committee, Faculty Board of Physics and Chemistry, Cambridge
1991-05	Head of Department of Materials Science and Metallurgy, University of Cambridge
1985-90	Henry Bell Wortley Professor of Materials Engineering, and Head of Department of Materials Science and Engineering, University of Liverpool
1980-85	University Lecturer, Department of Metallurgy & Science of Materials, Oxford
1974-85	Senior Research Fellow, Jesus College, Oxford

## SOME PREVIOUS EXTERNAL POSITIONS

---

2010 - 2011	Master, Worshipful Company of Armourers and Brasiers
2006 - 2011	EPSRC Steering Committee for the National Facility for III-V Semiconductors, Sheffield
2005 - 2011	Advisory Panel, The Leverhulme Trust
2003 - 2011	Chairman, International Advisory Board, National Institute for Materials Science, Japan
2002 - 03	President, Institute of Materials, Minerals and Mining
2004 - 05	Chairman of the Managing Board, Institute of Materials, Minerals and Mining
1984 - 87	Chairman, Commission on Electron Diffraction, and Member of the Commission on International Tables, International Union of Crystallography
1988 - 92	Chairman, Materials Science and Engineering Commission, and Member of Council, Science and Engineering Research Council
2003	Chairman, International Review Panel of Materials, The Technion, Israel
1993 - 96	Vice-Chairman, Technology Foresight Materials Panel, Office of Science and Technology
2005 - 08	Scientific Advisory Board, Institute for Materials Research and Engineering, Singapore
2006 - 08	EPSRC Steering Committee for International Review of Materials
1997	Selby Fellow, Australian Academy of Science
2003 - 06	Awards Committee, Royal Academy of Engineering
1999 - 06	National Advisory Committee on Electronic Materials and Devices (DTI)
1989 - 92	Advisory Committee, Davy-Faraday Laboratory, Royal Institution
1990 - 2000	Scientific Advisory Committee on Advanced Materials for EC International Scientific Co-operation Programme
2000 - 01	Metallurgy and Materials Panel, Research Assessment Exercise 2001, HEFCE
2003 - 04	International Advisory Panel for New University, United Arab Emirates
1998 - 99	President, Physics Section, British Association
1997 - 98	Fellow in the Public Understanding of Physics, Institute of Physics
1994 - 03	Member, John Templeton Foundation, USA

## EDITORIAL

---

2001 - 06	Editor-in-Chief, Reports on Progress in Physics
2007 - 08	Organising Committee Member for MRS Bulletin Special Issue: "Harnessing Materials for Energy", published May 2008

## SOCIETIES

---

Fellow, The Royal Society  
Fellow, The Royal Academy of Engineering  
Fellow, City and Guilds Institute  
Fellow, Institute of Materials, Mining and Minerals  
Fellow, Institute of Physics  
Fellow, Royal Microscopical Society  
Member, Academia Europaea

## VISITING INDUSTRIAL FELLOW

---

1969	United States Steel Corporation, Pittsburgh
1979	AT&T Bell Laboratories, Murray Hill, New Jersey

## DIRECTORSHIPS

---

2011 - 2012	CamGaN Ltd
2012 - 2012	Intellec Ltd
2012 - 2013	Plessey Lighting Ltd

Colin Humphreys is Professor of Materials Science and Director of Research in the Department of Materials Science and Metallurgy, University of Cambridge and a Fellow of Selwyn College, Cambridge. He is a Fellow of the Royal Society and a Fellow of the Royal Academy of Engineering. He was educated at Luton Grammar School, Imperial College (BSc) and Cambridge (PhD). He was a Lecturer at Oxford and a Professor in Liverpool before coming to Cambridge. He has published hundreds of papers on electron microscopy and given many plenary and invited lectures throughout the world. He founded and directs the Cambridge Centre for Gallium Nitride (GaN). He founded a spin-off company, CamGaN, to exploit the research of his group on low-cost LEDs for home and office lighting. The company was acquired in February 2012 by Plessey, which is now manufacturing LEDs based on this technology at their factory in Plymouth, UK. He founded and directs the Cambridge/Rolls-Royce Centre for Advanced Materials for Aerospace. Materials developed by this Centre are now flying in Rolls-Royce engines. He has given public lectures on science throughout the world. He has received national and international medals for his research in electron diffraction and microscopy and on gallium nitride.

He was the Master of the Worshipful Company of Armourers and Brasiers in 2010-2011, and the President of the Institute of Materials, Minerals and Mining in 2002-2003. From 2003-2011 he was the Chairman of the International Advisory Board of the National Institute for Materials Science in Japan. In his limited spare time he writes books on science and religion and is the author of *The Miracles of Exodus* (Harper Collins, 2003) and *The Mystery of the Last Supper: Reconstructing the Final Days of Jesus*. (Cambridge University Press, 2011), which has recently been translated into Russian, German, Portuguese, Japanese and Greek. He was Knighted in 2010 for services to science.