## Anthony K. Cheetham FRS

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Date and place of Birth: 16th Nov. 1946; Stockport, U.K. (UK and US citizen)

#### Education St. Catherine's College, Oxford 1965/69 Honorary Scholar (1968), B.A. (Class 1) in Chemistry (1969) Wadham College, Oxford, Senior Scholar 1969/71 Doctorate Research under Prof. Sir Brian Fender. M.A., D.Phil. (1972). **Academic Appointments** Lincoln College, University of Oxford 1971-74 E.P. Abraham Cephalosporin Junior Research Fellow. University of Oxford University Lecturer in Chemical Crystallography 1974-90 Reader in Inorganic Materials 1990-91 Tutor in Inorganic Chemistry, Christ Church 1974-91 Emeritus Student (Fellow), Christ Church 1991-present Arizona State University Visiting Professor, Fulbright Scholar 1977 University of California, Berkeley Visiting Associate Professor 1979 Royal Institution, London Visiting Professor of Solid State Chemistry. 1986-2000 University of California, Santa Barbara Professor of Materials and Professor of Chemistry (Abovescale) 1991-2007 Director, Materials Research Laboratory 1992-2004 Director, International Center for Materials Research 2004-2007 Emeritus Professor of Materials and Chemistry 2007-present University of Cambridge Goldsmiths' Professor of Materials Science 2007-present Professorial Fellow, Trinity College 2007-present

#### **Other Appointments**

Director, General Funds Investment Trust plc, 1983-7 Senior Scientific Advisor, Catalytic Solutions Inc., 1996-2007 Science Advisor to the Board of Unilever, 2000-2008 Co-Founder & Advisor, NGen Enabling Technologies Fund, 2001-2007 Science Advisor to H.H. Sheik Saud, Ruler of Ras al Khaimah, UAE, 2007-present Science Advisor to Deutsche Bank Asset Management (2009-2012) Royal Society Enterprise Fund Board (2010-present, Chair 2012-present) Royal Society Trading Ltd. (Chair, 2011-present)

# **Major Awards & Honors**

1977 Fulbright Scholarship (Arizona State University) 1981 Visiting Foreign Scientist (American Chemical Society) 1982 Corday-Morgan Medal (Royal Society of Chemistry, London) 1988 Solid State Chemistry Award (Royal Society of Chemistry, London) 1994 Visiting Professor & Distinguished Lecturer, University of Sydney 1994 Elected Fellow of the Royal Society, London 1996 Structural Chemistry Award (Royal Society of Chemistry, London) 1997 Chaire Internationale de Recherche, Blaise-Pascal, Paris (1997-9) 1997 Elected Foreign Member of Pakistan Academy of Sciences 1998 Elected Foreign Member of National Academy of Sciences of India 1998 Elected Fellow of the Academy of Sciences of the Developing World (TWAS) 1999 Elected Member of the Academy of Ceramics 1999 Distinguished Fellow, Nehru Center for Advanced Scientific Research, Bangalore 2001 Elected Honorary Fellow of the Indian Academy of Sciences 2001 International Chair Francqui, Brussels (2001-2) 2002 Bonner Chemiepreis, Univ. Bonn 2004 Somiya Award of the IUMRS (with Prof. C.N.R. Rao) 2006 Docteur Honoris Causa, Université de Versailles St. Quentin-en-Yvelines 2007 Royal Society Wolfson Research Merit Award (2007-2012) 2008 Elected Foreign Member of Mongolian Academy of Sciences 2008 Royal Society Leverhulme Medal 2008 European Research Council Advanced Investigator Award (2008-2013) 2009 Elected Member of the Academia Europaea 2010 Elected member of the Council of La Maison de la Chimie, Paris 2011 Trustee, Koerber European Science Award 2011 Elected Member of the German National Academy of Sciences (Leopoldina) 2011 Platinum Medal of the Institute of Materials, Minerals and Mining 2011 Raman Chair, Indian Academy of Sciences 2011 Honorary DSc, University of St. Andrews 2011 Honorary DSc, Tumkur University, India 2011 TWAS Medal Lecturer (Academy of Sciences for the Developing World) 2012 Nyholm Prize for Inorganic Chemistry (Royal Society of Chemistry, London) 2012 Honorary Fellow, Jawaharlal Nehru Centre for Advanced Scientific Research 2012 Treasurer and Vice-President, The Royal Society 2013 Elected Member of the German National Academy of Science and Engineering (acatech) 2014 Chemical Pioneer Award, American Institute of Chemists 2014 Humboldt Research Award, Germany 2014 Elected Fellow of the American Academy of Arts and Sciences

2015 Honorary DSc, University of Warwick

# **Named Lectures**

1995 Kilpatrick Lecturer, Illinois Institute of Technology

2002 Maddin Lecturer, University of Pennsylvania

2003 Professor C.N.R. Rao Lecture Award; Chemical Research Society of India

2003 Humphry Davy Prize Lectureship of the Royal Society (at French Academy of Sciences)

2005 Distinguished Summer Lecturer, Northwestern University

2006 Oakley R. Vail Lecturer, Wake Forest University

2008 Cheetham Lecturer, University of California, Santa Barbara

2008 Herron Lecturer, Florida State University

2008 Staudinger-Durrer Lecturer, ETH Zurich

2011 Hirsch Lecturer, University of Oxford

2011 Zernike Colloquium, University of Groningen

2012 Cariscience Lecturer; Jamaica, Barbados and Trinidad

2013 Earl Muetterties Memorial Lecturer, UC Berkeley

2014 McBain Memorial Lecturer, National Chemical Laboratory, Pune, India

- 2014 Rutherford Memorial Lectures (in Pretoria and Cape Town)
- 2015 Professor C.N.R. Rao Distiguished Lecture in Nanoscience; IITB, Mumbai
- 2015 Linus Pauling Lecturer, Oregon State University
- 2015 Xingda Lecturer, Peking University
- 2015 Foreign Famous Master Lecture, Tsinghua University
- 2016 Davison Lecturer, MIT

#### National and International Advisory Boards

- Member, Scientific Advisory Board, Max-Planck-Institut für Festkörperforschung, Stuttgart (1999-2010)
- Member, Scientific Advisory Board, Center for Advanced Interdisciplinary Research in Materials Science, Universidad de Chile, Santiago (2000-8))
- Member, Scientific Advisory Board, Materials Creation Training Program IGERT, UCLA (2002-6)
- Member, Scientific Advisory Board, National High Magnetic Field Laboratory, Florida (2003-7)
- Member, International Advisory Board, CSIRO Division of Manufacturing & Infrastructure Technology, Australia (2003-6)
- Member, Scientific Advisory Board, Department of Chemistry, Southampton, UK (2004 2009)
- Member, Scientific Advisory Board, African Institutes for Science and Technology (2004-2008)
- International Advisory Board, National Institute for Materials Research, Tsukuba, Japan (since 2006)
- Member, Scientific Advisory Board, Department of Chemistry, UCL, UK (2006-2010) Member, Scientific Advisory Board, ICMS, Bangalore (since 2008)
- Member, President's Advisory Council, King Abdulla University of Science and Technology, Saudi Arabia (since 2010)
- Member, Scientific Advisory Board, Molecular Foundry, Lawrence Berkeley National Laboratory (since 2012)
- Member, Scientific Advisory Board, Max-Planck-Institut für Chemische Physik fester Stoffe, Dresden (since 2013)

Member, Scientific Advisory Board for Chemistry, IISER Pune (since 2014)

#### Membership of professional societies

Royal Society of Chemistry, C.Chem., FRSC	1976-present
Fellow, Institute of Materials, Minerals and Mining	2008-present

### **Professional service**

L'Institut Laue-Langevin, Grenoble	
Sub-committee (Structure, Magntism)	1983-85, 1985-88
Scientific Council	1988-91
Rutherford-Appleton Laboratory, Spallation Neutron Source	
Chairman, HRPD Users' Group	1983-88
Chairman, SNS Science Planning Group	1985-86
ISIS Science Advisory Committee	1986-91
Chairman, Beam Allocation Panel	1988-91
European Synchrotron Radiation Facility, Grenoble	
Planning Cttee on Diffraction Instruments	1989-91
Science and Engineering Research Council	
Neutron Beam Research Cttee	1988-91
Interfaces and Catalysis Initiative	1988-91
LINK Management Cttee on New Catalysts	1989-91
Argonne National Laboratory	

IPNS Program Advisory Cttee	1991-96
Los Alamos National Lab. LANSCE Advisory Cttee	1992-96
Department of Energy (through Lawrence Berkeley Lab)	
Pulsed Source Steering Cttee	1994-95
Los Alamos National Laboratory	1001
Chair; Review of Center for Mat. Sci.	1996
MacMaster University, Canada	1007
Member; Review of Brockhouse Institute	1996
Brookhaven National Laboratory	1006 2000
High Flux Beam Reactor, Prog. Adv. Cttee	1996-2000
Oak Ridge National Laboratory, Spallation Neutron Source	1996-2000
Advisory Cttee Materials Research Society, Member of Council	1990-2000
Los Alamos National Lab. LANSCE DRC	2002-2006
Board of Electors to the Professorship in Inorganic	2002-2000
Chemistry at Oxford University	2002-3
Science Initiative Group, Princeton, Advisory Committee	2002 J 2007-present
Chair, External Evaluation Committee, WPI-MANA, NIMS,	2007 present
Tsukuba, Japan	2007-present
Royal Society Investment Committee	2008-present
Royal Society Audit Committee	2009-2012
Board of Electors to the Isaac Wolfson Professorship of	
Materials Science at Oxford University	2009-2010
Scientific Advisory Council, Diamond Light Source	2010-2012
Royal Society Development Board (now Ext. Adv. Board)	2010-present
Royal Society Finance Committee (Chair)	2010-present
Royal Society Investment Committee (Chair)	2010-present
Royal Society Council	2010-present

# **Editorial Boards (current)**

APL Materials, Editorial Board RSC Materials Horizons, Editorial Board Science and Technology of Advanced Materials, Associate Editor

### Former Graduate Students and their current whereabouts (\* indicates Faculty members)

#### From Oxford:

\*P. D. Battle - University of Oxford D. A.O. Hope - Qinetiq A. R. Rae-Smith - Micro Consultants \*W. T. A. Harrison - Univ. of Aberdeen \*J. P. Attfield FRS - University of Edinburgh A. K. Nowak - Shell, Amsterdam J. M. C. Taylor - Univ. of London \*C. P. Grey FRS – University of Cambridge J. K. Warner - Sydney P. J. Astell-Burt - De Beers P. W. Betteridge - Chemical Design Ltd. \*P. Lightfoot - Univ. of St. Andrews \*M. J. Rosseinsky FRS - Univ. of Liverpool \*A. P. Wilkinson - Georgia Tech., GA L. M. Bull - Chevron-Texaco (deceased)

# From UC Santa Barbara:

\*M. P. Attfield – Univ. Manchester V. Moravetski - TMA, Inc., Palo Alto

J. M. Newsam – F-Cubed, San Diego A. J. S. Chowdhury – Univ. of Oxford S. K. E. Forghany - University of Delft D. M. Thomas - C.E.G.B. \*J. D. Gale - Curtin University, Australia S. J. Crennell - University of Bath A. T. Ashcroft - Unilever plc R. J. B. Jakeman - ICI, Paints Div. M. M. Eddy - STI, Santa Barbara, CA P. M. Banks - IBM (UK) Ltd. C. J. J. den Ouden - Shell, Amsterdam \*R. E. Morris - Univ. of St. Andrews N. J. Henson - Los Alamos Nat. Lab., NM

J. J. Owen - Borax, CA

\*L. Smith - Clarke University, MA

G. Vitale - Intervep, Venezuela \*B. J. Campbell - Brigham Young Univ. UT A. M. dos Santos - Oak Ridge Natl. Lab. \*S. E. Hayes - Washington Univ, MO S. J. Weigel - Air Products, PA G. Nery - Weizmann Inst., Israel B. A. Adair - Catalytica, Inc., CA \*P. M. Forster – Univ. Nevada at Las Vegas Kinson Kam – Haldor Topsøe K. Page - Los Alamos Nat. Lab., NM R. K. Feller – BASF (USA) \*E. E. Rodriguez – Univ. Maryland P. Jain – Los Alamos Nat. Lab., NM C. A. Merrill- Not known Z. Hulvey - Univ. Nevada, Las Vegas From Cambridge: J. D. Furman – UC Berkeley (studying law) I. Etchart - St. Gobain, Boston T. D. Bennett – University of Cambridge A. Kalaji – Argonne National Laboratory R. P. Burwood – University of Cambridge H. H. M. Yeung - NIMS, Tsukuba, Japan S. Cao – Johnson Matthey plc P. J. Beldon - University of Waterloo, Canada \*A. L. Smith - T. U. Delft S. Kaveh – University of Cambridge Former Post Docs and their current whereabouts (\* indicates Faculty members) \*B. R. Albert – Darmstadt S. Ayyappan - Univ. Louisiana \*A. Chippindale – Reading \*Q. Gao - Chin. Acad. Sci., Shanghai \*J. A. Hriljac - Univ. Birmingham \*S. Natarajan - IISc, Bangalore \*M. Terrones – Penn. State Univ. \*U. Ruschewitz - U. Köln \*Dae-Sung Kim - Seoul Univ., South Korea S. Neeraj – 3M, MN Jong-San Chang - KRICT, South Korea \*S. M. Auerbach - UMass. MA J.-C. Gabriel – CEA, Grenoble \*S. J. Hibble - Reading \*C. F. Mellot – Collège de France, Paris B. K. Peterson – Exxon Mobil, NJ S. C. Weston - Exxon-Mobil, NJ \*N. Stock - Univ. Kiel Michaela Klotz - St. Gobain, Paris J. Gomm – Santa Barbara High School, CA Ronan Le Toquin - Cree Lighting, NC F. Chéviré – CNRS, Nantes P. Simoncic - Univ. Bern, Switzerland G. Gundiah – Lawrence Berkeley NL L. Appelhans – Sandia National Lab, NM \*E. Falcao, Univ. Forteleza, Brazil \*D. Eder – Univ. Münster \*J.-C. Tan, Univ. of Oxford P. J. Saines – Univ. of Oxford \*A. Thirumurugan, IISER Trivandrum M. J. Wharmby – Diamond Light Source \*W. Li, Huazong Univ. Sc. & Tech., China S. Tominaka, NIMS, Tsukuba, Japan S. Henke, Ruhr-Univ, Bochum \*J. Foster, Univ. Sheffield J.-H. Lee, UC Berkeley

## Publications

600 publications in refereed journals (Web of Science Core Database) with >27,000 citations (h index = 82), plus six books, many chapters, and several US patents.