Curriculum Vitae Sir Robert Tony Watson, CMG, FRS

My career has evolved from a Ph.D. student at OMC, London University; a post-doctoral fellow at University of California, Berkeley and University of Maryland, USA; a research scientist at the Jet Propulsion Laboratory, California Institute of Technology, USA; a Federal Government program manager/director at the US NASA; a scientific advisor in the Office of Science and Technology Policy (OSTP), White House, USA; a scientific advisor, manager and chief scientist at the World Bank; chief scientific advisor to the UK Department of Environment, Food and Rural Affairs; to my present part-time positions as a Professor of Environmental Sciences and strategic director for the Tyndall Center at the University of East Anglia, UK, and Sir Louis Matheson Fellow, Monash Sustainability Institute (MSI), Monash University, Australia. In parallel to my formal positions I have chaired, co-chaired or directed a number of national and international scientific, technical and economic assessments, including WMO/UNEP stratospheric ozone depletion, Global Biodiversity Assessment, Millennium Ecosystem Assessment, UK National Ecosystem Assessment and it's Follow-on, Intergovernmental Panel on Climate Change, and the Intergovernmental Assessment of Agricultural Scientific and Technology for Development. I am currently a Vice-chair of the Intergovernmental Platform for Biodiversity and Ecosystem Services. I have also been awarded a number of honours (2012 - Knights Bachelor - UK, and 2003 - "Companion of the Order of Saint Michael and Saint George" - UK); fellowships (2011 - Fellow of the Royal Society, UK), and awards, including 2014 - UN Champion of the World for Science and Innovation, 2010 - Asahi Glass Blue Planet Prize, 2008 - American Association for the Advancement of Science Award for International Scientific Cooperation, and I contributed to the 2007 - Nobel Peace Prize for the IPCC, which I chaired from 1997-2002.

Current Positions

Chair of Environmental Sciences at the University of East Anglia and Director for Strategic Development, Tyndall Center

Department of Environmental Sciences, University of East Anglia, Norwich, Norfolk Telephone: 01603-593118, 07825-721-370 (mobile)

e-mail: robert.watson@uea.ac.uk

Sir Louis Matheson Fellow, Monash Sustainability Institute (MSI), Monash University, Clayton Campus, Melbourne, Australia

Previous Positions

- Chief Scientific Advisor for the UK Department of Environment, Food and Rural Affairs (DEFRA): September 2007-September 2012
- Chief Scientist, and Senior Advisor for Sustainable Development, World Bank: July 2006 July 2007
- Chief Scientist, and Senior Advisor for Environmentally & Socially Sustainable Development, World Bank: April 2003 – July 2006
- Chief Scientist, and Director for Environmentally & Socially Sustainable Development, World Bank: January 2000 April 2003
- Director, Environment Department, World Bank, Washington D.C., August 1997 December 1999

- Senior Advisor for Environment, Environment Division, World Bank, Washington D.C., May 1996 June 1997
- Associate Director for Environment, November 1993 May 1996: Office of Science and Technology Policy, White House, Washington D.C. 20506
- Consultant, June 1993-Nov 1993: Office of Science and Technology Policy, White House, Washington D.C. 20506
- Director, Science Division and Chief Scientist April 1993 November 1993: Office of Mission to Planet Earth, National Aeronautics and Space Administration (NASA), Washington, D.C.
- Director, Process Studies Program Office, NASA 1990-1993:
- Earth Science and Applications Division Branch Chief for Upper Atmospheric Research and Tropospheric Chemistry Programs, NASA 1987-1990
- Acting Program Scientist (NASA) 1980-1987 for (1) Upper Atmosphere Research Program;
 (2) Interdisciplinary Earth Science Research Program; and (3) Global Habitability Initiative --Detailee from the Jet Propulsion Laboratory
- Research Scientist 1980-1987: Jet Propulsion Laboratory, Pasadena, CA
- Member of the Technical Staff 1978-1980: Jet Propulsion Laboratory, Pasadena, CA
- Senior Scientist 1976-1978: Jet Propulsion Laboratory, Pasadena, CA
- Postdoctoral Research Scientist 1974-1976: University of Maryland, College Park, MD
- Postdoctoral Research Scientist 1973-1974: University of California, Berkeley, CA

Special Positions/Experience

- Vice-chair and member of the Bureau of the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) 2012 present
- Member of the US National Academy of Science Panel on Policy and Global Affairs 2015 to present
- Member of the Welcome Trust Panel for selecting climate research proposals 2012- present
- Chair of the Interim Engagement Committee for Future Earth 2013-2014
- Co-chair of the UK National Ecosystem Assessment Follow-On 2012 2014
- Member of the Royal Society selection panel 4 for applications for membership 2011-2014
- Chair/vice-chair of the intergovernmental negotiations of the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) 2009-2012
- Co-chair of expert panel for the Convention on Biological Diversity on Geo-engineering and Biodiversity 2011- 2012
- Co-chair of the UK National Ecosystem Assessment 2010-2011
- Chair Higher Education Funding Council for England Pilot Research Excellence Framework for Earth Sciences and Environment: 2010
- Co-chair of the International Convention on Biological Diversity Ad-Hoc Technical Experts Group on Climate Change and Biodiversity: 2008-2009, and 2002-2003
- Host for the NHK 2-one hour documentary Climate in Crisis and Planet in Peril, 2008
- Member of the US National Academy of Science Panel on Climate Change, Energy and Security: 2008 present
- Chair of the World Bank expert review panel of the 2009 World Development Report on Climate Change: 2008-2009
- Director of the International Assessment of Agricultural Science and Technology for Development: 2003 2008

- Co-chair of the Board of Directors of the International Millennium Ecosystem Assessment: 2000 2005
- Co-chair: International WMO/UNEP Scientific Assessments of the Current Knowledge of the Processes Controlling the Abundance and Distribution of Atmospheric Ozone, 2002, 2002, 1998, 1994, 1991, 1989, 1988, and 1985
- Chairman, UNEP/WMO Intergovernmental Panel on Climate Change September 1997- April 2002
- Member of the International Council of Scientific Unions Advisory Committee on the Environment: 1998 2003
- Chair of the International Steering Committee for the UNEP project: Assessment of Impacts and Adaptation to Climate Change: 2001 2003
- Member of the IPCC Bureau: 1993 to April 2002
- Convening lead author of IPCC Technical paper on Climate Change and Biodiversity: April 2001-April 2002
- Chair of an International Panel on the Scientific and Policy Inter-linkages Among Global Environmental Issues 1996 to 1998
- Co-chair: Intergovernmental Panel on Climate Change (IPCC) Working Group II (Impacts, Adaptation, and Mitigation) 1993 September 1997
- Chair: UNEP/WMO Synthesis Panel for international Ozone Assessment (Science, Impacts, Technology, and Economics), 1989, 1991, 1994
- Chair: UNEP Global Biodiversity Assessment 1993 to 1995
- Chair of the Science and Technical Advisory Panel to the Global Environmental Facility (World Bank, United Nations Development Program, and United Nations Environment Programme) 1991-November 1993
- Chair: UNEP/WMO Synthesis Panel for Methyl Bromide (Science, Technology, and Economics) 1992
- Chaired Chapter on Greenhouse Gases for the IPCC Scientific Assessment for Working Group I (1990 and 1992). Member of Steering Group for IPCC WG #1, 1990 and 1992.
- U.S. Representative on the Intergovernmental Panel on Climate Change (IPCC) Science Working Group
- Consultant (unpaid) to the Manufacturing Chemists Association/Chemical Manufactures Association (currently named the American Chemistry Council) on stratospheric ozone depletion: 1976 1990
- Technical Advisor for the U.S. Government for both bilateral and multilateral negotiations of the Vienna Ozone Convention and the Montreal (CFC) Protocol
- Technical Advisor for the U.S. Government on Climate Change and member of the U.S. delegation to the International Negotiation Committee on Climate Change
- Co-chair: Committee on Earth and Environmental Sciences (CEES) Assessment Working Group
- Testified many times before U.S. Senate and U.S. House of Representatives Committees and Sub-Committees on Ozone, Global Warming, and other Global Change Research issues
- NASA Representative to Office of Science and Technology Policy, Committee on Earth and Environmental Sciences, Global Change Working Group

Education

- Ph.D., (Gas Phase Chemical Kinetics), 1973, Queen Mary College, London University, London, England
- B.Sc. 1st class (chemistry), 1969, Queen Mary College, London University, London, England

Honorary Academic Degrees

- 2010 Fellow of Queen Mary College, London University, England
- 2009 Honorary Doctor of Science, Cranfield University, England
- 2003 Honorary Doctor of Science, University of East Anglia, England
- 2003 Honorary Doctor of Science, UMIST, England

Honours and Decorations

- 2012 Knights Bachelor United Kingdom
- 2003 Honorary "Companion of the Order of Saint Michael and Saint George" United Kingdom

Fellowships

• 2011 – Fellow of the Royal Society, UK

Awards (non-US Government)

- 2015 British Ecological Society Ecological Engagement Award
- 2014 UN Champion of the World for Science and Innovation
- 2012 UK Royal Society for the Protection of Birds Medal
- 2010 Asahi Glass Blue Planet Prize
- 2008 American Association for the Advancement of Science Award for International Scientific Cooperation
- 2007 Nobel Peace Prize for the IPCC, which I chaired from 1997-2002
- 2006 Zayed science award for the Millennium Ecosystem Assessment, for which I was the board co-chair: Given to the authors of the Millennium Assessment for Scientific and Technological Achievements in Environment
- 2005 Recognized by the Rolling Stone magazine as one of 25 movers and shakers for the environment
- 2005 United Nations Environment Programme / World Meteorological Organization Vienna Convention Award
- 2003 Global Green Award for International Environmental Leadership US chapter of the Green Cross International formed by Mikhail Gorbachev
- 1995 UNEP Award for Protection of the Ozone Layer
- 1993 Climate Institute Scientific Achievement Award for Coordinating Scientific assessments
- 1993 American Association for the Advancement of Science Award for Scientific Freedom and Responsibility
- 1993 American Meteorological Society Special Award "for notable efforts in organizing and conducting international assessments in ozone depletion and global change"
- 1992 U.S. National Academy of Sciences Award for Scientific Reviewing
- 1991 American Geophysical Union's Edward A. Flinn, III Award established to recognize individuals who personify the American Geophysical Union's motto of unselfish cooperation in research through their facilitating coordination and implementing activities (first recipient)
- 1989 Designated member of UNEP's "The Global 500: The Roll of Honor for Environmental Achievement"

Awards - US Government

- 2000 U.S. Environmental Protection Agency Climate Protection Award
- 1994 U.S. Environmental Protection Agency Award for scientific understanding of the ozone layer
- 1993 NASA Group Achievement Award (Earth Observing System)
- 1992 NASA Cooperative External Achievement Award (High Speed Research Program)
- 1989 NASA Distinguished Service Medal
- 1989 NASA Public Service Group Achievement Award (Antarctic Aircraft Ozone Expedition)
- 1989 NASA Group Achievement Award (International Ozone Trends Panel)
- 1987 NASA OSSA Edelson Award
- 1986 NASA Public Service Group Achievement Award (International Ozone Assessment
- 1983 NASA Exceptional Service Medal

Academic Awards

- London Educational Award for three years to attend London University, England, for undergraduate studies 1966-1969
- Science Council Award for three and one half years for Ph.D. studies at London University, England 1969-1973
- Draper's Company Prize for Chemistry for being top graduating student of the year 1969

Publications;

40 Refereed Journal Publications, 60 Refereed National and International Scientific Assessments and Reviews, 4 key World Bank Publications, and 3 Book Chapters