George M. Whitesides was born August 3, 1939 in Louisville, KY. He received an A.B. degree from Harvard University in 1960 and a Ph.D. from the California Institute of Technology (with J.D. Roberts) in 1964. He was a member of the faculty of the Massachusetts Institute of Technology from 1963 to 1982. He joined the Department of Chemistry of Harvard University in 1982, and was Department Chairman 1986-89, and Mallinckrodt Professor of Chemistry from 1982-2004. He is now the Woodford L. and Ann A. Flowers University Professor.

**Awards**

Alfred P. Sloan Fellowship (1968)

American Chemical Society (ACS) Award in Pure Chemistry (1975)

Harrison Howe Award (Rochester Section of the ACS) (1979)

Alumni Distinguished Service Award (California Institute of Technology) (1980)

Remsen Award (ACS, Maryland Section) (1983)

Arthur C. Cope Scholar Award (ACS) (1989)

James Flack Norris Award (ACS, New England Section) (1994)

Arthur C. Cope Award (ACS) (1995)

Defense Advanced Research Projects Agency Award for Significant Technical Achievement (1996)

Madison Marshall Award (ACS) (1996)

U.S. National Medal of Science (1998)

Sierra Nevada Distinguished Chemist Award (Sierra Nevada Section of the ACS) (1999)

The Wallac Oy Innovation Award in High Throughput Screening (Society for Biomolecular Screening) (1999)

Award for Excellence in Surface Science (Surfaces in Biomaterials Foundation) (1999)

Von Hippel Award (Materials Research Society) (2000)

World Technology Award for Materials from the World Technology Network (2001)

Doctorate Honoris Causa, University of Twente (The Netherlands) (2001)

Small Times Magazine’s Researcher of the Year award (2002)

Pittsburgh Analytical Chemistry Award (Society for Analytical Chemists of Pittsburgh) (2003)

Kyoto Prize for Advanced Technology (Inamori Foundation, Japan) (2003)

Paracelsus Prize (Swiss Chemical Society) (2004)

Ralph and Helen Oesper Award (ACS, Cincinnati Section) (2004)

Jacob Heskel Gabbay Award in Biotechnology and Medicine (Jacob and Louise Gabbay Foundation) (2004)

2004 Dickson Prize in Science (Carnegie Mellon University) (2005)

Dan David Prize in Future Science (Dan David Foundation, Israel) (2005)

Linus Pauling Award (Northwest Section ACS) (2005)

Welch Award (2005)

UAA-Dhirumbhai Ambani Award (National Academy of Science, India) (2006)

Priestley Award (American Chemical Society) (2007)

R&D Magazine’s Scientist of the Year (2007)

August Wilhelm von Hofmann Lecture, German Chemical Society (2007)

American Institute of Chemists Gold Medal (2007)

Wheland Medal (U. Chicago) (2008)

Outstanding Achievement Award in Nanotechnology (Ohio State University) (2008)

Nanoscience Prize (International Society for Nanoscale Science, Computation and Engineering) (2008)

Prince of Asturias Award in Science and Technology (Prince of Asturias Foundation, Spain) (2008)

Benjamin Franklin Medal in Chemistry (Franklin Foundation) (2009)

Popular Mechanics Breakthrough Award (2009)

100 Most Creative People, FAST Company (2009)

Dreyfus Prize in the Chemical Sciences (2009)

IKCOC Prize (International Kyoto Conference on Organic Chemistry) (2009)

Othmer Gold Medal (Chemical Heritage Foundation) (2010)

King Faisal International Prize for Science (2011)

F.A. Cotton Award (Texas ACS Section) (2011)

Gold Medal (Industrial Research Institute) (2013)

Jan Czochralski Award (European Materials Research Society) (2014)

**Honorary Degrees**

University of Twente (The Netherlands, 2001)

McGill University (Canada, 2010)

University of Windsor (Canada, 2010)

Aarhus University (Denmark, 2011)

Université Libre de Bruxelles (Belgium, 2012)

Freie Universität Berlin (Germany, 2012)

State University of New York, Binghamton (2013)

University of Victoria (Canada, 2013)

North Carolina State University (2014)

Institute of Chemical Technology (India, 2015, D. Sc.)

University of Bath (England, 2015)

**Memberships and Fellowships**

American Academy of Arts and Sciences

National Academy of Sciences

National Academy of Engineering

National Academy of Inventors

American Philosophical Society

Fellow of the American Association for the Advancement of Science

Fellow of the Institute of Physics

American Physical Society

New York Academy of Sciences

World Technology Network

American Chemical Society

Foreign Fellow of the Indian National Academy of Science

Honorary Member of the Materials Research Society of India

Honorary Fellow of the Chemical Research Society of India

Royal Netherlands Academy of Arts and Sciences

Honorary Fellow of the Royal Society of Chemistry (UK)

Institut de France-Académie des sciences (2010)

**Advisory Positions (1980 - present)**

National Research Council: Board on Chemical Sciences and Technology (1984-89; Chairman, 1986-99); Naval Studies Board (1989-97; Vice Chairman, 1992-97); Committee on Bioprocess Engineering (1991-92); Board on Science, Technology and Economic Policy (1991-97); Visiting Committee to NIST/ATP on Advanced Technology (1994-97); Board on Physics and Astronomy (1997-2001) Committee on Science and Technology for Counter Terrorism (2002); Committee on Nanotechnology for the Intelligence Community (2003); Committee on Prospering in a Global Economy (the "Gathering Storm" Committee, 2005); Committee on Science, Engineering and Public Policy (COSEPUP, 2005-2013, Chairman); Committee on Forefronts of Science at the Interface of Physical and Life Sciences (2007-08); Committee on Determining Core Capabilities in Chemical and Biological Defense Research and Development (Advisor, 2012);

National Science Foundation: Chemistry Advisory Committee (1984-86; Chairman, 1986), Materials Research Advisory Committee (1991-93; Chairman, 1993), Review Panel for the Materials Research Laboratories (1993, co-Chairman); Advisory Committee for Mathematics and Physical Sciences (1993-96); NSF Senior Assessment Panel: International Assessment of U. S. Mathematical Sciences (1997); Workshop on Chemical Bonding Centers, (2003); Workshop on Chemistry and Cognition (2004); NBIC/Convergence Committee (Chairman, 2012)

Department of Defense: Defense Advanced Research Projects Agency Defense Science Research Council (1984-2013); Defense Science Board (1993-2003); Threat Reduction Advisory Committee to the Defense Threat Reduction Agency (1998- 2006); Defense Science Board Task Force on Deterring Weapons of Mass Destruction (2015-)

National Aeronautics and Space Administration (NASA): Biological and Physical Research Maximization and Prioritization (REMAP) Task Force (2002).

Other: M.I.T. Advisory Committee for Lincoln Laboratory (1985-2004); Scientific Advisory Committee for the Scripps Research Institute (1993-7); Sandia Science and Technology Advisory Board (2002-04, 2006-09); Sandia NWEAB (2004-07); Intelligence Science Board (2003-08); Committee on Science at Brandeis (2004-5, chairman); Institute for Soldier Nanotechnology (ISN, MIT, 2005-08); Advisory Committee for the Materials Research Center (U. Illinois/DoE, 2005-07); MIT Visiting Committee for Chemistry (2010-2012); Instute for Justice (Department of Justice) (2011-); Advisory Committee for Lawrence Berkeley National Laboratory (2011-); JCESR's Energy Storage Advisory Committee, Argonne National Laboratory (2012-).

Non-U.S: International Committee to Assess the Status of Chemistry in the UK (EPSRC, 2003; chairman); Advisory Board for Mesa+ (U. Twente, 2004-6); Advisory Committee for the ISAS (Dortmund, 2005-6 ); Genomics Research Center (Taiwan, 2006 - ; chairman); Academia Sinica (Taiwan, ISAB, 2008- chairman); Board of Governors of the Academy of Scientific and Innovative Research, AcSIR, (India, 2010-); International Technology Advisory Board, Office of Strategic R&D Planning, Ministry of Knowledge (Republic of Korea, 2010-2012); Professor, AcSIR, India (2011-); Euro-Chemistry Advisory Board (2011-), Wellcome Trust Affordable Healthcare Committee, UK (2011 - ).

Scientific Advisory Boards (2010 - present): MC-10, Sun Catalyix, Reliance Corporation (India, 2009-); NextGen Jane (2014- ).

**Boards of Directors (2000 - present; \*= current)**

Rohm and Haas, Dexter, Advanced Magnetics, Assemblon, Concurrent Biomedical, Theravance\*, Theravance Biopharma\* Hughes Research Laboratories, Surface Logix, Nano-Terra\*, Arsenal Biomedical\*, 480 Biomedical\* Diagnostics for All (501-c-3)\*, MC 10 Corporation, Soft Robotics\*

**Editorial Boards**

Angewandte Chemie, Langmuir, Small, Lab on a Chip, Soft Robotics.

**Research Interests**

Chemistry, materials science, biophysics, the role of water in biomolecular recognition, the hydrophobic effect, complexity and emergence, surface science, microfluidics, paper as a material, self-assembly, micro- and nanotechnology, healthcare for developing economies, catalysis, origin of life, dissipatice systems, soft robotics, rational drug design, simplicity, and infochemistry.