



## George M. Whitesides

Élu Associé étranger le 8 décembre 2009 dans la section de Chimie

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George M. Whitesides, né en 1939 aux États-Unis, est Professeur à l'Université de Harvard. On lui doit des contributions majeures dans des domaines très diversifiés tels que la spectroscopie par résonance magnétique nucléaire, la chimie organométallique et la synthèse organique biocatalysée. Ses travaux en science des matériaux, en chimie des surfaces, en microfluidique et en nanotechnologie ont un très fort impact non seulement en chimie, mais également en biologie et en bio-ingénierie. C'est le cas en particulier de la lithographie douce, technique dont il est l'inventeur et qui est fort utile pour des applications de type biopuces. Un des chimistes les plus éclectiques de son temps.

*George M. Whitesides, born in 1939 in the USA, is Professor at Harvard University. He made major achievements in very diversified areas, such as nuclear magnetic resonance spectroscopy, organometallic chemistry, and biocatalyzed organic synthesis. His works on material science, surface chemistry, microfluidic, and nanotechnology have a very strong impact not only in chemistry, but also in biology and bio-engineering. This is namely the case for soft lithography, a technique he invented and which is highly useful in such application as biochips. One of the most eclectic chemists of his time.*

### Curriculum vitae

1963-1982	Member of the Faculty of the Massachusetts Institute of Technology (MIT) (USA)
1982-1986	Professor, Department of Chemistry of Harvard University (USA)
1986-1989	Chairman, Department of Chemistry of Harvard University
1982-2004	Mallinckrodt Professor of Chemistry, Harvard University
2004-	Woodford L. and Ann A. Flowers University Professor, Harvard University

### Membership

1968	Fellow of the Royal Society of Chemistry (Honorary since 2005)
1977	Member of the American Academy of Arts and Sciences
1978	Member of the National Academy of Sciences (USA)
1997	Member of the American Philosophical Society
2001	Foreign Fellow of the Indian National Science Academy
2002	Member of the Royal Netherlands Academy of Arts and Sciences
2004	Fellow of the American Association for the Advancement of Science
2005	Member of the National Academy of Engineering (USA)
2006	Member of the New York Academy of Sciences

## **Main Awards**

1975 American Chemical Society Award in Pure Chemistry

1995 Arthur C. Cope Award

1998 National Medal of Science

1999 Award for Excellence in Surface Science, Surfaces in Biomaterials Foundation

2003 Kyoto Prize for Advanced Technology, Inamori Foundation

2004 Paracelsus Prize, Swiss Chemical Society

2005 Dan David Prize, Dan David Foundation; Welch Award; Linus Pauling Medal Award (Portland, Puget Sound and Oregon Sections of ACS)

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

2007 Priestley Medal, American Chemical Society; American Institute of Chemists Gold Medal

2008 Nanoscience Prize, ISNS, Computation and Engineering; Prince of Asturias Award in Science and Technology (Spain)

2009 Benjamin Franklin Medal in Chemistry; The Inaugural Dreyfus Prize in Chemical Sciences

2010 The Othmer Gold Medal

Le 18 mai 2010