

Benoit B. Mandelbrot is Sterling Professor of Mathematical Sciences at Yale University and IBM Fellow Emeritus (Physics) at the IBM Research Center.

Author of *Les objets fractals*, 1975, 1984, 1989 and 1995 (translated into Basque, Brazilian, Bulgarian, Chinese, Czech, Italian, Portuguese, Rumanian, and Spanish) and *The Fractal Geometry of Nature*, 1982 (translated into Chinese, German, Japanese, Korean, Russian, and Spanish). His multi-volume *Selecta* began with *Fractals and Scaling in Finance: Discontinuity, Concentration, Risk*, 1997; *Fractales, hasard et finance*, 1997; *Multifractals and 1/f Noise: Wild Self-Affinity in Physics*, 1999; *Gaussian Self-Affinity and Fractals: Globality, The Earth, 1/f Noise and R/S*, 2002; and *Chaos and Fractals: the Mandelbrot Set and Beyond*, 2004. With M.L. Frame, he co-authored *Fractals, Graphics, and Mathematics Education*, 2002. With R.L. Hudson, he coauthored *The (mis)Behavior of Markets: a Fractal View of Risk, Ruin, and Reward*, 2004.

Fellow, American Academy of Arts and Sciences; Member, U.S. National Academy of Sciences, American Philosophical Society; Foreign Member, Norwegian Academy of Science and Letters.

His awards include the 1993 *Wolf Prize for Physics* and the 2003 *Japan Prize for Science and Technology*. Also, the 1985 *F. Barnard Medal for Meritorious Service to Science* ("Magna est Veritas") of the U.S. National Academy of Sciences, the 1986 *Franklin Medal for Signal and Eminent Service in Science* of the Franklin Institute of Philadelphia, the 1988 *Charles Proteus Steinmetz Medal* of IEEE, the 1988 (first) *Science for Art Prize* of Moët-Hennessy-Louis Vuitton, the 1989 *Harvey Prize for Science and Technology* of the Technion in Haifa, the 1991 *Nevada Prize*, the 1994 *Honda Prize*, the 1996 *Médaille de Vermeil de la Ville de Paris*, the 1999 *John Scott Award*, the 2000 *Lewis Fry Richardson Award* of the European Geophysical Society, and the 2002 *William Procter Prize* of Sigma Xi.

He also received a *Distinguished Service Award for Outstanding Achievement* from the California Institute of Technology, and a *Humboldt Preis* from the Alexander von Humboldt Stiftung.

Graduate of the Paris Ecole Polytechnique; M.S. and Ae.E. in Aeronautics, California Institute of Technology; Docteur ès Sciences Mathématiques, University of Paris, Doctor *honoris causa*: Syracuse U., Laurentian U. (Canada), Boston U., State U. of New York, U. of Guelph (Canada), U. of Dallas, Union College, U. of Buenos Aires (Argentina), Open U. (UK), Athens U. of Business and Commerce (Greece), U. of St. Andrews (Scotland), Emory U., Universität Bremen (Germany). Pace U., U. of Tel Aviv (Israel).

Positions before joining IBM were with the CNRS in Paris, Philips Electronics, M.I.T., Princeton Institute for Advanced Study, University of Geneva, University of Lille and Ecole Polytechnique. Institute Lecturer at M.I.T. Visiting Professor of Economics, later of Applied Mathematics, Mathematics, and the Practice of Mathematics, at Harvard, of Engineering at Yale, of Physiology at the Albert Einstein College of Medicine, Professeur de l'Académie des Sciences à l'École Polytechnique, Paris. Visited Cambridge, UK as G.C. Steward Visiting Fellow at Gonville and Caius College, Scott Lecturer at Cavendish Laboratory and Member at Isaac Newton Institute of Mathematical Sciences during a special program on fractals.

Best known as the founder of fractal geometry – the first broad attempt to investigate quantitatively the ubiquitous notion of roughness. He had no formal teacher but was strongly influenced by Paul Lévy, Norbert Wiener and John von Neumann. He seeks a measure of order in physical, mathematical or social phenomena that are characterized by abundant data but wild variability. He speaks eloquently for "the unity of knowing and feeling."