

Zewail From Wikipedia, the free encyclopedia Ahmed Hassan Zewail Portrait of Ahmed Zewail Born February 26, 1946 (age 65) Damanhour, Egypt Nationality Egyptian and American Fields Chemistry, physics Institutions California Institute of Technology Alma mater University of Alexandria, University of Pennsylvania Known for Femtochemistry Notable awards Nobel Prize for Chemistry (Sweden)(1999) The Franklin Medal (USA) (1998) Wolf Prize (Israel) (1993) Priestley Medal (USA) (2011) Ahmed Hassan , IPA: [æmæd æsæn zeˈweɪ]) (born February 26, 1946) is an أحمد حسن زويل: Zewail (Arabic Egyptian–American scientist who won the 1999 Nobel Prize in Chemistry for his work on femtochemistry. He is the Linus Pauling Chair Professor Chemistry and Professor of Physics at the California Institute of Technology. Contents [hide] 1 Birth and education 2 Academic career 2.1 Research 3 Political work 4 Publications 5 References 6 See also 7 External links [edit]Birth and education Ahmed Zewail was born on February 26, 1946 in Damanhour, Egypt and raised in Disuq. He received bachelor's degree and MS degree from the University of Alexandria before moving from Egypt to the United States to complete his PhD at the University of Pennsylvania with advisor Robin Hochstrasser. He completed a post–doctoral fellowship at the University of California, Berkeley with advisor Charles B. Harris.[1] [edit]Academic career After some post doctorate work at UC–Berkeley, he was awarded a faculty appointment at Caltech in 1976, where he has remained since, and in 1990, he was made the first Linus Pauling Chair in Chemical Physics.[1] He became a naturalized citizen of the United States in 1982. Zewail has been nominated and will participate in President Barack Obama's Presidential Council of Advisors on Science and Technology (PCAST), an advisory group of the nation's leading scientists and engineers to advise the President and Vice President and formulate policy in the areas of science, technology, and innovation.[2] [edit]Research Zewail's key work has been as a pioneer of femtochemistry—i.e. the study of chemical reactions across femtoseconds. Using a rapid ultrafast laser technique (consisting of ultrashort laser flashes), the technique allows the de*****ion of reactions on very short time scales – short enough to analyse transition states in selected chemical reactions.[3] In 1999, Zewail became the tenth ethnic Egyptian to receive the Nobel Prize, following Egyptian president Anwar Al–Sadat (1978 in Peace), Naguib Mahfouz (1988 in Literature). Mohamed ElBaradei followed him (2005 in peace). Other international awards include the Wolf Prize in Chemistry (1993) awarded to him by the Wolf Foundation, the Tolman Medal (1997), the Robert A. Welch Award (1997), and the Priestley Medal from the American Chemical Society in 2011.[4] In 1999, he received Egypt's highest state honor, the Grand Collar of the Nile. Zewail was awarded an honorary doctorate by Lund University in Sweden in May 2003 and is a member of the Royal Swedish Academy of Sciences. Cambridge University awarded him an honorary Doctor of Science in 2006. In May 2008, Zewail received an honorary doctorate from Complutense University of Madrid. In February, 2009, Zewail was awarded an honorary doctorate in arts and sciences by the University of Jordan.[5] In May 2010, he received a Doctor of Humane Letters from Southwestern University. His students include scientists like Martin Gruebele Zewail is married, and has four children. [edit]Political work In his June 4, 2009 speech at Cairo University, US President Barack Obama announced a new Science Envoy program as part of a "new beginning between the United States and Muslims around the world." In January 2010, Ahmed Zewail, Elias Zerhouni, and Bruce Alberts became the first US science envoys to Islam, visiting Muslim–majority countries from North Africa to Southeast

Asia.[6] When asked about rumors that he might contest the 2011 Egyptian presidential election, Ahmed Zewail said: "I am a frank man... I have no political ambition, as I have stressed repeatedly that I only want to serve Egypt in the field of science and die as a scientist." [7] During the 2011 Egyptian protests he announced his return to the country. Zewail said that he would join a committee for constitutional reform alongside Ayman Nour, Mubarak's rival at the 2005 presidential elections and a leading lawyer.[8] Zewail was later mentioned as a respected figure working as a intermediary between the military regime ruling after Mubarak's resignation, and revolutionary youth groups such as the April 6 Youth Movement and young supporters of Mohamed ElBaradei.[9] [edit]Publications Advances in Laser Spectroscopy I, ed. A. H. Zewail, SPIE, Bellingham, 1977 Advances in Laser Chemistry, ed. A. H. Zewail, Springer-Verlag, Berlin-Heidelberg, 1978 Photochemistry and Photobiology, Vols. 1 and 2, ed. A. H. Zewail, Harwood Academic, London, 1983 Ultrafast Phenomena VII, eds. C. B. Harris, E. P. Ippen, G. A. Mourou and A. H. Zewail, Springer-Verlag, Berlin-Heidelberg, 1990 The Chemical Bond: Structure and Dynamics, ed. A. H. Zewail, Academic Press, Boston, 1992 Ultrafast Phenomena VIII, eds. J.-L. Martin, A. Migus, G. A. Mourou, and A. H. Zewail, Springer-Verlag, Berlin-Heidelberg, 1993 Ultrafast Phenomena IX, eds. Age of Science (autobiography) Physical Biology: From Atoms to Medicine, ed. A. H. Zewail, Imperial College Press, London, 2008 4D Electron Microscopy, ed. A. H. Zewail, Imperial College Press, London, 2009 Encyclopedia of Analytical Chemistry (editor) [edit]References ^ a b Zewail, Ahmed. "Autobiography". Nobelprize.org. Retrieved 12 February 2011. ^ "President Obama Announces Members of Science and Technology Advisory Council". The White House. Retrieved 12 February 2011. ^ "Press Release: The 1999 Nobel Prize in Chemistry". Nobelprize.org. Retrieved 12 February 2011. ^ "Zewail Wins 2011 Priestley Medal", Chemical & Engineering News, p 5, June 21, 2010. ^ Kheetan, Thameen (26 February 2009). "Egyptian Nobel laureate calls for 'scientific renaissance' in Arab world". Jordan Times. Retrieved 2009-02-28. ^ America.gov ^ Zewail: I have no political ambitions .. I would like service of Egypt a scientist only ^ ANSAm (1 February 2011). "EGYPT: ZEWAIL RETURNS, CREDIBLE POST-MUBARAK FIGURE". ANSAm. Retrieved 5 February 2011. ^ Fahim, Kareem; Kirkpatrick, David D. (February 12, 2011). "Military Offers Assurances to Egypt and Neighbors". The New York Times. Retrieved 12 February 2011 - أمريكي[ملحوظة 1] حاصل على جائزة نوبل في الكيمياء لسنة 1999. محتويات 1 نشأته وتعليمه