

Biographical Sketch

Ahmed Zewail is the Linus Pauling Chair professor of chemistry and physics, and director of the Center for Physical Biology at Caltech. He is the sole recipient of the 1999 Nobel Prize for the development of the field of *Femtochemistry*. In the post-Nobel era, he developed *4D Electron Microscopy* for the direct visualization of matter in space and time. Dr. Zewail's other honors include fifty Honorary Degrees, Orders of Merits, Postage Stamps and more than hundred international awards. He has published some 600 articles and 14 books and is known for his effective public lectures and writings, not only on science but also in global affairs. For his leadership role in these world affairs, he received, among others, the "Top American Leaders Award" from The Washington Post and Harvard University. In 2009, President Barack Obama appointed him to the Council of Advisors on Science and Technology, and in the same year he was named the first U.S. Science Envoy to the Middle East. Subsequently, the Secretary General of the United Nations Ban Ki-moon invited Dr. Zewail to join the UN Scientific Advisory Board. In Egypt, he serves in the Council of Advisors to the President. Following the 2011 Egyptian revolution, the government established "Zewail City of Science and Technology" as the national project for scientific renaissance, and Dr. Zewail became its first Chairman of the Board of Trustees.

Biographical Profile

Ahmed Zewail is the Linus Pauling Chair professor of chemistry and professor of physics at the California Institute of Technology (Caltech). For ten years, he was the director of the National Science Foundation's Laboratory for Molecular Sciences (LMS), and is currently the director of the Moore Foundation's Center for Physical Biology at Caltech. He received his early education in Egypt and in the U.S. completed a Ph. D. from the University of Pennsylvania and a postdoctoral fellowship from IBM at the University of California, Berkeley, before joining the faculty at Caltech.

Dr. Zewail was the sole recipient of the 1999 Nobel Prize in chemistry for his pioneering developments in femtoscience, making possible observations of atoms in motion on the femtosecond (10^{-15} second) time scale. These developments lead to the establishment of the discipline of "*Femtochemistry*", and its related fields. More recently, he and his group developed the field of "*4D Electron Microscopy*" for the direct visualization in the four dimensions of space and time of materials and biological behaviors.

For his contributions to science and for his public service, Dr. Zewail has garnered honors from around the globe. Fifty Honorary Degrees in the sciences, arts, philosophy, law, medicine, and humane letters have been conferred on him, including those from Oxford University, Cambridge University, Peking University, École Normale Supérieure, Yale University, University of Pennsylvania, and Alexandria University. He has been decorated with Orders of State and Merit, including the Order of the Grand Collar of the Nile, Egypt's highest state honor. Postage stamps have been issued in commemoration of his contributions to science and humanity. Among the more than hundred international prizes and awards, he has received the Albert Einstein World Award, Benjamin Franklin Medal, Leonardo da Vinci Award, Robert A. Welch Award, Wolf Prize, King Faisal Prize, Othmer Gold Medal, and the Priestley Gold Medal. In his name, international prizes have been established in Amsterdam, Cairo, Detroit, Trieste, and Washington (DC), and in Cairo the AZ Foundation is providing support for the dissemination of knowledge and for merit awards in arts and sciences. In 2011, the Egyptian government established "Zewail City of Science and Technology" as the national project for scientific renaissance, and Dr. Zewail became its first Chairman of the Board of Trustees.

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In California, Dr. Zewail resides with his wife Dema Faham, and he is a proud father of four children: Maha, Amani, Nabeel, and Hani, three of them having scholarly bonding to Caltech and Berkeley. Over the years, he has mentored more than 400 members of his research school, and published more than 600 articles and treatises. His biography, "Voyage through Time" (and "Age of Science"), which has now been published in 20 languages and editions, offers an exposé of his life, science and world affairs until the receipt of the Nobel Prize.