

## BIOGRAPHY

### Linus Pauling

Linus Pauling was born in Portland, Oregon, on 28 February 1901, and was educated in Oregon (B. S. in Chemical Engineering, Oregon Agricultural College, 1922) and California (Ph. D., California Institute of Technology, 1925). He was a member of the teaching staff of the California Institute of Technology from 1922 to November 1963, Research Professor of the Physical and Biological Sciences in the Center for the Study of Democratic Institutions, Santa Barbara, California, 1963 to 1967, Professor of Chemistry in the University of California, San Diego, 1967 to 1969, Professor of Chemistry in Stanford University, 1969 to 1973 (now Professor Emeritus), and Research Professor, Linus Pauling Institute of Science and Medicine, 1973 to present. He was George Eastman Professor at Oxford University in 1948 and has been a visiting professor in the University of California, Cornell University, University of Illinois, Massachusetts Institute of Technology, Harvard, Princeton, Madras, and several other universities and colleges.

Much of his scientific work has dealt with the nature of the chemical bond. It has included experimental studies on the structure of crystals by x-ray diffraction and the structure of gas molecules by electron diffraction, the study of the magnetic properties of substances, the investigation of the nature of serological systems and the structure of antibodies, the structure of proteins, the molecular basis of general anesthesia, and the role of abnormal molecules in causing disease, especially abnormal hemoglobins in relation to sickle-cell anemia and other hereditary hemolytic anemias, and abnormal enzymes in relation to mental disease. In addition, he has carried on theoretical studies, especially the application of quantum mechanics to the structure of molecules and the nature of the chemical bond, the extension of the theory of valence to include metals and intermetallic compounds, and the development of a theory of the structure of atomic nuclei and the nature of the process of nuclear fission. During recent years much of his work has been on the application of chemistry to biological and medical problems.

Professor Pauling was awarded the Nobel Prize in Chemistry for 1954 for his research on the nature of the chemical bond and its application to the elucidation of the structure of complex substances. His contributions to chemistry have been recognized also by several other awards, including the American Chemical Society Award in Pure Chemistry, the Nichols Medal, the Gibbs Medal, the Richards Medal, the Gilbert Newton Lewis Medal, the Avogadro Medal, the Pasteur Medal, the Pierre Fermat Medal, the Sabatier Medal, the Davy Medal of the Royal Society, the Linus Pauling Medal of the Puget Sound and Oregon Sections of the American Chemical Society. In 1967 he received the Roebling Medal of the Mineralogical Society of America. On September 18, 1975 he was awarded the National Medal of Science for 1974

by President Ford. In February 1978 the Presidium of the Academy of the U.S.S.R. awarded him the 1977 Lomonosov Gold Medal for his work in chemistry and biochemistry, and in April 1979 he received the Chemical Sciences Award of the National Academy of Sciences, U.S.A. In 1984 he was awarded the most distinguished honor of the American Chemical Society, the Priestley Medal, and in 1987, the American Chemical Society presented him with its Award in Chemical Education. He is recipient of the Božo Težak Madel of the Croatian Chemical Society in 1987.

His discoveries in the field of medicine led to the award to him of the Thomas Addis Medal of the National Nephrosis Foundation, the Phillips Medal for Contributions to Internal Medicine by the American College of Physicians, the Gold Medal of the Rudolph Virchow Medical Society of New York, the Gold Medal of the French Academy of Medicine, the Vermeil Medal of the City of Paris, the Modern Medicine Award for Distinguished Achievement, the Eliasberg and Goedel Medallions in Anesthesiology, the Dr. Martin Luther King, Jr. Medical Achievement Award, given for pioneering work in determining the cause of sickle-cell anemia, and the Distinguished Medical Scientist Award of the Arthritis Research Institute of America.

He has been given honorary doctorates by thirty-seven universities, including Chicago, Princeton, Yale Cambridge, Oxford, London, Paris, Toulouse, Montpellier, Liege, Melbourne, Cracow, Berlin and Zagreb. He was President of the American Chemical Society for 1949 and Vice-President for the American Philosophical Society from 1951 to 1954. He is a foreign member of the Royal Society of London, Associate etranger of the French Academy of Sciences, and an honorary member of the academies of Science of Norway, U.S.S.R., India, Italy, Belgium, Portugal, Poland, Austria Yugoslavia, Romania, and several other countries.

In 1948 he was given the Presidential Medal for Merit by President Truman »for exceptionally meritorious conduct in the performance of outstanding services to the United States from October, 1940 to June, 1946.« He is Grand Officer of the Order of Merit of the Italian Republic and recipient of the Medal of the Senate of the Republic of Chile.

On October 10, 1963 he was awarded the Nobel Peace Prize for 1962. He has also received The International Lenin Peace Prize, the Ghandi Peace Prize, the Grotius Medal for Contributions to International Law, the Janice Holland Peace Award (jointly with Ava Helen Pauling), and the Women Strike for Peace Annual Award (May, 1982). In 1961 he was chosen Humanist of the Year by the American Humanist Association. He received the Gold Medal of the National Institute of Social Sciences in 1979, the Vollum Award, and the 1978 Award of Merit of the Decalogue Society of Lawyers.

He has published over 600 scientific papers, about 200 articles on social and political questions, especially about peace, and several books, including *The Structure of Line Spectra* (with Samuel Goudsmit); *Introduction to Quantum Mechanics* (with E. Bright Wilson, Jr.); *The Nature of the Chemical Bond*; *General Chemistry*; *College Chemistry*; *No More War!*; *The Architecture of Molecules* (with Roger Hayward); *Science and World Peace*; *Vitamin C and the Common Cold* (which received the Phi Beta Kappa prize for best scientific

book of the year); *Orthomolecular Psychiatry: Treatment of Schizophrenia*, co-edited with David Hawkins; *Chemistry* (with Peter Pauling); *Vitamin C, the Common Cold, and the Flu*; and *Cancer and Vitamin C* (with Ewan Cameron). His latest book, *How to Live Longer and Feel Better*, was published in 1986.

Professor Pauling in 1923 married Ava Helen Miller, also a native of Oregon. He and his wife have four children, fifteen grandchildren, and five great-grandchildren. Their home is Deer Flat Ranch, Salmon Creek, Big Sur, California. Mrs. Pauling died on 7 December 1981.