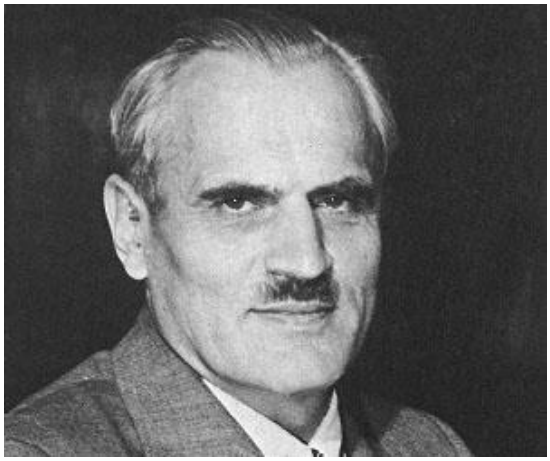
Arthur Holly Compton

	ALSO LISTED IN
Physicists	
	ALSO KNOWN AS
Arthur Holly Compton	
	FAMOUS AS
Nobel Prize Laureate in Physics	
	NATIONALITY
American Famous American Men	
	RELIGION
Baptist	
	BORN ON
10 September 1892 AD Famous 10th September Birthdays	
	ZODIAC SIGN
Virgo Virgo Men	
	BORN IN
Wooster, Ohio, USA	
	DIED ON
15 March 1962 AD	
	PLACE OF DEATH
Berkeley, California, USA	
	FATHER
Elias Compton	
	MOTHER
Otelia Catherine	
	SIBLINGS
Karl Taylor Compton, Wilson Martindale Compton	
	SPOUSE:
Betty Charity McCloskey	
	CHILDREN
Arthur Allen Compton, John Joseph Compton	
	EDUCATION
University of Cambridge, The College of Wooster, Princeton University	
	DISCOVERIES / INVENTIONS
Compton Effect	
	AWARDS:
Nobel Prize for Physics (1927) Matteucci Medal (1930) Franklin Medal (1940) Hughes Medal (1940)	



Arthur Holly Compton was a renowned American physicist who first rose to fame with his famous revolutionary discovery of the Compton Effect for which he also won the Nobel Prize in Physics. This discovery confirmed the dual nature of electromagnetic radiation as both a wave and a particle. Thomson was initially interested in astronomy before he shifted his focus to the study of quantum physics. He started his research in Cavendish Laboratory of Cambridge University and this research led to the discovery of Compton Effect. Later on, during the Second World War, Compton became head of the Manhattan Project's Metallurgical Laboratory. Manhattan Project developed the first nuclear weapons of the world and Compton played a key role in it. He also served as Chancellor of Washington University in St. Louis. Under his leadership, the University made remarkable academic progress; the university formally desegregated its undergraduate divisions, named its first female full professor, and enrolled a record number of students. After he retired as Chancellor, he continued to work as Distinguished Service Professor of Natural Philosophy till 1961. For his contribution to the science, Compton received many awards and honors in his lifetime.

Childhood & Early Life

- Arthur Compton was born on September 10, 1892, in Wooster, Ohio, to Elias and Otelia. He was born into a family of academics. His father was a dean of the University of Wooster, while both his brothers, Karl and Wilton attended the Princeton University and earned PhDs from the University.
- In his early years, Compton was more interested in astronomy; he photographed the Halley's Comet in 1910.
- In 1913, he earned his Bachelor's Degree in Science from the Wooster University. A year after his graduation, Compton earned his Master of Arts degree from Princeton University. He completed his PhD in Physics in 1916.

Career

- Arthur began his career in 1916–1917, as a physics instructor at the University of Minnesota. For the following two years he worked on the development of sodium lamps as a research engineer of the Westinghouse Lamp Company. During the First World War, Compton developed aircraft instrumentation for the Signal Corps.
- In 1919, Compton was awarded one of the first two National Research Council Fellowships that allowed students to study abroad. He decided to go to Cambridge University's Cavendish

Laboratory, where he worked with George Paget Thomson, and studied X-ray scattering and Gamma Ray Absorption.

- In 1920, he returned to the United States and was appointed as the Head of the Department of Physics at Washington University, St. Louis.
- In 1922, he discovered the 'Compton Effect', which confirmed the dual nature of electromagnetic radiation as both a wave and a particle.
- In 1923, Compton's paper explaining X-Ray shifts was published in the Physical Review. The same year, he moved to the Chicago University as a Physics Professor.
- In 1926, he worked for General Electric. He was a consultant for the Lamp department, here. In the same year, he came up with his first book called 'X-Rays and Electrons'.
- During 1930–1940 Arthur Compton became interested in the Earth's cosmic rays. He led a world-wide study of the geographic variations in the intensity of cosmic rays.
- Compton was appointed as the chairman of the NASC (National Academic Sciences Committee) in 1941. The committee studied the military potential of atomic energy. The committee's work led to the development of the popular Manhattan Project.
- In 1942, he became head of the Manhattan Project's Metallurgical Laboratory. He was tasked with responsibility for producing nuclear reactors to convert uranium into plutonium, finding ways to separate the plutonium from the uranium and to design an atomic bomb.
- After the Second World War ended Compton resigned from his post of the Physics professor at the University of Chicago and became Chancellor of the Washington University in 1946.
- Compton resigned from the post of Chancellor of Washington University in 1954. However, he continued to work as Distinguished Service Professor of Natural Philosophy till 1961. .

Major Works

- The most remarkable work of Arthur Compton was the discovery of the Compton Effect in 1922. This discovery confirmed the dual nature of electromagnetic radiation as both a wave and a particle.
- In 1942, he played a key role in Manhattan Project which led to the development of first nuclear weapons in the world.

Awards & Achievements

- Compton shared the 1927 Nobel Prize in Physics with C.T.R. Wilson. He won the prize for his discovery of Compton Effect which confirmed the dual nature of electromagnetic radiation as both a wave and a particle.
- In 1930, he won the Matteucci Gold Medal for his discovery of the Compton Effect.
- In 1940, he was awarded the Hughes Medal of Royal Society and Benjamin Franklin Medal. He was awarded these medals for his huge contribution in the field of science.