



Name in English: Wu Chien-shiung
Name in Chinese:
Name in Pinyin: Use Pinyin for the Chinese name
Gender: Female
Birth Year: 1912 -1997
Birth Place: Shanghai, China

Profession (s): A physicist with an expertise in radioactivity. Worked on the Manhattan Project (to enrich the uranium fuel) and disproved experimentally the conservation of parity (disproved theoretically by Yang & Lee in 1957). nicknamed by scientists as “First Lady of Physics”, “Madame Curie of China” and also “Madame Wu”.

Education: B.S., Physics, 1934, National Central University, Nanking, China; Ph.D., 1940, Physics, University of California, Berkeley

Awards: The first female instructor in the Physics Department of Princeton University; The first woman with a Princeton honorary doctorate; The first female President of the American Physical Society (1975, through an election). Member of the National Academy of Sciences (elected 1958) ; Research Corporation Award 1958; Achievement Award, American Association of University Women 1960; Comstock Award, National Academy of Sciences 1964 Scientist of the Year Award, Industrial Research Magazine 1974; Tom W. Bonner Prize, American Physical Society 1975; National Medal of Science (U.S.) 1975 Wolf Prize in Physics, Israel 1978; Honorary Fellow Royal Society of Edinburgh Fellow American Academy of Arts and Sciences; Fellow American Association for the Advancement of Science; Fellow American Physical Society

Contribution (s): At Columbia University (1944-80), developed a process to separate uranium isotopes by gaseous diffusion and by developing improved Geiger counters. She assisted Tsung-Dao Lee personally in his parity laws development (with Chen Ning Yang) by providing him with a possible test method for beta decay in 1956 that worked successfully. Her book Beta Decay (1965) is still a standard reference for nuclear physicists

Publications/Patents: "Experimental test of parity conservation in beta decay," *Phys. Rev.* 105: 1413 (1957), with E. Ambler, R. W. Hayward, D. D. Hoppes, and R. P. Hudson.

"Experimental test of the conserved vector current theory of the beta spectra of B^{12} and N^{12} ," *Phys. Rev. Letters* 10: 253 (1963), with Y. K. Lee and L. W. Mo, and "The universal Fermi interaction and the conserved vector current in beta decay," *Rev. Mod. Phys.* 36: 618 (1964) where a fuller account of this experimental result and its significance is given.

"Recent investigation of the shapes of beta-ray spectra," *Rev. Mod. Phys.* 22: 386 (1956).

"The angular correlation of scattered annihilation radiation," *Phys. Rev.* 77: 136 (1950), with I. Shakhnov.

"Muonic atoms and nuclear structure," *Annual Reviews of Nuclear Science* 19: 527 (1969), with L. Wilets.

Published book:

Beta Decay, Interscience Publishers, New York 1966, with S. A. Moszkowski.

External Links:

<http://www.physics.ucla.edu/~cwp/Phase2/Wu, Chien Shiung@841234567.html>

<http://womenshistory.about.com/od/sciencephysics/a/Chien-Shiung-Wu.htm>

<http://www.wcs.org.tw/>