**Shirley Ann Jackson**



American physicist

Chair of the President’s Intelligence Advisory Board

Eighteenth president of Rensselaer Polytechnic Institute

Ph.D., nuclear physics –Massachusetts Institute of Technology, 1973

***Biography***

Shirley Jackson was born in Washington D.C. on August 5th, 1946. She graduated from Roosevelt High School, where she attended accelerated programs in both math and science, in 1964 as valedictorian. That same year she began classes at MIT, where fewer than twenty African Americans were studying. She was the only African American student studying theoretical physics. While in school, she did volunteer work at Boston City Hospital and tutored students at Roxbury YMCA. She earned her bachelor’s degree in 1968, writing her thesis on solid-state physics.

Jackson decided to stay at MIT for her doctoral work, in part to encourage more African American students to attend the institution. She worked on elementary particle theory for her Ph.D., which she completed in 1973. She was the first African-American woman to earn a doctorate degree from MIT, and only the second African American women in the United States to earn a doctorate in physics.

She is currently married to Morris Washington, a physics professor at Rensselaer Polytechnic Institute, and has one son, Alan, a Dartmouth College alumnus.

***Research***

Shirley Jackson completed several years of postdoctoral research of subatomic particles at various laboratories. She conducted research on electrons on liquid helium, layered materials and their properties, superlattices (a periodic structure of layers of two or more materials), two-dimensional electron gas, semiconductors, quantum dots (small semiconductor particles), polarons, and mesoscopic systems (systems larger than atoms but smaller than everyday objects). On these topics and others, she has prepared or collaborated on over 100 scientific articles. In 1995, President Bill Clinton appointed Jackson to serve as the Chairman of the U.S. Nuclear Regulatory Commission, where she became both the first woman and the first African American to hold that position. She was also the first woman and the first African American to become the president of Rensselaer Polytechnic Institute, where she is still one the highest paid private university presidents today. She currently serves on the boards of directors for approximately thirteen organizations.

***Awards, Honors, & Special Recognitions***

* Martin Mariette Aircraft Company Scholarship and Fellowship
* Prince Hall Masons Scholarship
* National Science Foundation Traineeship
* Ford Foundation Advanced Study Fellowship
* Elected to the American Physical Society and American Philosophical Society
* Recipient of the National Medal of Science
* Received Rhictmyer Memorial Award
* Received many honorary doctorate degrees

Information on this biography was found from Wikipedia, <http://www.math.buffalo.edu/mad/physics/jackson_shirleya.html>, and <http://www.blackpast.org/aah/jackson-shirley-ann-1946>.