

# Biographical Description for The HistoryMakers® Video Oral History with William Jackson

PERSON

Jackson, William , 1936-

**Alternative Names:** Jackson, William , 1936-

**Life Dates:** September 24, 1936-

**Place of Birth:** Birmingham, Alabama

**Residence:**

**Occupations:** Astrophysicist

## Biographical Note

Astrophysicist and academic administrator William M. Jackson was born on September 24, 1936 in Birmingham, Alabama. He received his B.S. degree chemistry from Morehouse College and his Ph.D. degree in physical chemistry with a minor in physics and mathematics from Catholic University of America. His principle areas of expertise are in astrochemistry, chemical kinetics, photochemistry, and laser chemistry.

Upon graduation, Jackson was employed by a wide array of organizations in various capacities including Martin-Marietta Co., the National Bureau of Standards (now the National Institute of Standards and Technology), NASA's Goddard Space Flight Center, the University of Pittsburgh, Howard University, and the University of California, Davis. Jackson joined the faculty at the University of California, Davis (UCD) in 1990 as the associate dean for academic personnel. Jackson was awarded a \$1.2 million grant from the National Science Foundation to establish the Mentorship for Undergraduate Research Participants in Physical and Mathematical Sciences. There, he recruited and mentored many African Americans for the Ph.D. program in chemistry. From 2000-2005, Jackson was chair of the chemistry department

at U.C. Davis and retired as a Distinguished Professor in 2006. Throughout his career, Jackson published over one one-hundred and sixty scientific papers and was credited with a United States patent.

In the field of astro-chemistry, Jackson led the team that first used the IUE telescope to observe comets. His laboratory pioneered the utilization of tunable dye lasers to detect free radicals from the photodissociation of stable molecules. Jackson was also the first to use them for individual rotational levels that demonstrated that perturbations between electronic states could change the lifetimes of these levels. He has continued to measure the photochemical properties of cometary molecules in the laboratory and has demonstrated plausible mechanisms for the formation of carbon and carbon disulfide radicals in comets.

Jackson is the recipient of many awards from universities and scientific organizations. These include a Guggenheim Foundation Fellowship and an Alexander von Humboldt Research Award in 1996. Jackson is a member of the Morehouse College Chapter of Phi Beta Kappa National Honor Society, and was named a Fellow of the American Physical Society. In 1996, the Planetary Society named asteroid 1081 EE37 after him as “(4322) Billjackson,” in recognition of his contributions to planetary science.

William M. Jackson was interviewed by The HistoryMakers on November 6, 2012.

## Related Entries

**Russell, Claudia Cornelius Haygood** [CHILD OF]  
Mother

**Jackson, William Morgan** [CHILD OF]  
Father

**Waller, Della** [GRANDCHILD OF]  
Maternal Grandmother

**Haygood, Claude** [GRANDCHILD OF]  
Maternal Grandfather

**Jackson, William Morgan** [GRANDCHILD OF]  
Paternal Grandfather

**Catholic University of America** [STUDENT OF]  
[from ? to 1961]

**Ph.D. in Chemistry**

**Morehouse College** [STUDENT OF]

[from ? to 1956]

**B.S. in Chemistry**

**Diamond Ordnance Fuse Laboratory** [EMPLOYEEOF]

[from 1957 to 1957]

**Student Trainee**

**Martin-Marietta, Co.** [EMPLOYEEOF]

[from 1961 to 1963]

**Research Scientist**

**National Bureau of Standards & Technology** [EMPLOYEEOF]

[from 1961 to ?]

**Chemist**

**NASA Goddard Space Flight Center** [EMPLOYEEOF]

[from 1964 to 1969]

**Staff Chemist**

**University of Pittsburgh** [EMPLOYEEOF]

[from 1969 to ?]

**Visiting Associate Professor**

**NASA Goddard Space Flight Center** [EMPLOYEEOF]

[from 1970 to 1974]

**Senior Chemist**

**Howard University** [EMPLOYEEOF]

[from 1974 to 1985]

**Professor**

**University of California Lawrence Berkeley Laboratory** [EMPLOYEEOF]

[from 1980 to 1981]

**University of California, Davis** [EMPLOYEEOF]

[from 1990 to ?]

**Distinguished Professor**

**National Taiwan University** [EMPLOYEEOF]

[from 1996 to 1996]

**Professor, Department of Chemistry**

**National Organization for the Professional Advancement of Black**

**Chemists and Chemical Engineers (NOBCChE) [MEMBEROF]**  
**Co-Founder**

**American Chemical Society [MEMBEROF]**

**American Physical Society [MEMBEROF]**

**American Association for the Advancement of Science [MEMBEROF]**

**American Association of University Professors [MEMBEROF]**