# Biographical Description for The HistoryMakers® Video Oral History with Clayton W. Bates, Jr.

PERSON

Bates, Clayton W., Jr., 1932-

Alternative Names: Clayton W. Bates, Jr.;

Life Dates: September 5, 1932-

Place of Birth: New York, New York, USA

Residence: Palo Alto, CA

**Occupations:** Electrical Engineer; Physicist

### **Biographical Note**

Electrical engineer and physicist Clayton W. Bates, Jr. was born on September 5, 1932 in New York City, where he attended elementary school at New York Public School 119 and middle school at New York Junior High School 43. Bates earned his high school diploma from the all-boys Brooklyn Technical High School in 1950 where he was a member of the baseball, basketball, and track teams. As a young boy, he also enjoyed playing baseball and basketball in his Harlem neighborhood where he lived with his mother and older sister, Barbara. Bates' parents, Arline and Clayton Bates, Sr., divorced when he was a young teenager. Bates' love affair with science and engineering began early; as a youngster he enjoyed building model planes and dreamed of becoming a pilot.

From 1950 to 1954, Bates attended Manhattan College on a full academic scholarship where he received his B.S. degree in electrical engineering. Bates went on to earn his M.S. degree in electrical engineering from the Polytechnic Institute of Brooklyn. He then received a fellowship from Harvard University where he earned his second M.S. degree in electrical engineering in 1960. Bates went on to study at Washington University in St. Louis, Missouri where he received his Ph.D. degree in physics in 1966.

Following graduation, Bates worked for several engineering and scientific companies including Varian Associates, AVCO, Sylvania Electric Products, the Ford Instrument Company, and RCA. His projects ranged from low-level light detection and x-ray image intensification to the design of the nuclear reactor controls of the first SEA WOLF, the second atomic powered submarine. In 1972, Bates left Varian and accepted a position in Stanford University's Department of Materials Science and Engineering. Bates continued to work at Stanford for the next twenty-two years where he helped to

organize the Society of Black Scientists and Engineers. In 1984, Bates accepted the position of associate dean for graduate education and research in Howard University's College of Engineering, Architecture, and Computer Sciences. Throughout his career, Bates authored numerous publications. He has been committed to increasing the number of African Americans in STEM fields and improving scientific research at Historically Black Colleges and Universities.

Bates and his wife, Priscilla, raised three children: Katherine, Christopher and Naomi.

Clayton W. Bates, Jr. was interviewed by The HistoryMakers on March 5, 2005.

### **Related Entries**

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Brooklyn Technical High School [STUDENTOF]
 [from? to?]
New York Junior High School 43 [STUDENT OF]
 [from? to?]
Polytechnic Institute of New York University [STUDENT OF]
 [from? to?]
   M.S.
Harvard University [STUDENTOF]
 [from? to?]
   M.S.
Washington University in St Louis [STUDENTOF]
 [from? to?]
   Ph.D.
Manhattan College [STUDENTOF]
 [from? to?]
   B.S.
P.S. 119 [STUDENTOF]
 [from? to?]
Varian Associates [EMPLOYEEOF]
 [from 2004 to 2007]
Avco Corporation [EMPLOYEEOF]
 [from 2011 to 2014]
Sylvania Electric Products [EMPLOYEEOF]
 [from? to?]
Ford Instrument Company [EMPLOYEEOF]
 [from 198401 to 198510]
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## $RCA\ Corporation\ {\tiny [EMPLOYEEOF]}$

[from? to?]

# Stanford University, Department of Materials Science and Engineering [EMPLOYEEOF]

[from 1972 to 1994]

Howard University College of Engineering [employeeOf]

[from? to?]

**Associate Dean for Graduate Education and Research** 

Society of Black Scientists and Engineers [MEMBEROF]

[from 1973 to ?]