# **Biographical Description for The HistoryMakers® Video Oral History with Michael Spencer**

PERSON

Spencer, M. G. (Michael G.)

Alternative Names: Michael Spencer;

Life Dates: March 9, 1952-

Place of Birth: Detroit, Michigan, USA

Residence: Ithaca, NY

Work: Ithaca, NY

**Occupations:** Electrical Engineer; Computer Scientist;

### **Biographical Note**

Electrical Engineer, Computer Scientist and Engineering Professor Michael G. Spencer was born on March 9, 1952 in Detroit, Michigan. Spencer's passion for teaching is part of a family tradition, his mother and grandparents were teachers. He grew up in Washington, D.C. and travelled to Ithaca, New York to study at Cornell University. He earned his B.S. degree in 1974 and his M.S. degree in 1975. Spencer worked at Bell Laboratories from 1974 to 1977 before returning to Cornell to receive his Ph.D. degree in electrical engineering in 1981. He joined the faculty of Howard University as an assistant professor in 1984. Spencer also founded the Materials Science Center for Excellence in 1984 and served as its director for the entirety of his career at Howard. He spent the next eighteen years working and researching at Howard, becoming a full professor in 1990 and the David and Lucile Packard Chaired Professor of Materials Science in 1999. During this time, Spencer also worked as a visiting scientist at the National Aeronautics and Space Administration (NASA)'s JET Propulsion Laboratory. In 1999, he returned to his alma mater, Cornell University as professor of electrical engineering. He served as associate dean of research and graduate studies for the College of Engineering from 2002 to 2008. Spencer directed the Wide Bandgap Laboratory where he researched semiconductor materials like Silicon Carbide (SiC) and Gallium Nitride (GaN), as well as two dimensional semiconductors like graphene. He co-founded Widetronix, a company that builds low power long life betavoltaic batteries. Spencer has written over 130 publications concerning semiconductors and has also coauthored eleven United States patents.

Spencer has received much recognition for his research and teaching. In 1985, he received the Presidential Young Investigator Award from the National Science

Foundation. Spencer also received the QEM (Quality Education for Minorities) Giants of Science Award and the Allen Berman Research Publication Award from the Naval Research Laboratory. He served as one of the directors for the National Science Foundation (NSF) Nano-Fabrication Network. Spencer was a member of the program committee of the American Vacuum Society and the International Conference on Silicon Carbide and Related Materials. He also held memberships in the Electronic Materials Conference Organizing Committee and the Compound Semiconductor Symposium Organizing Committee. Spencer lives in Ithaca, New York. Michael G. Spencer was interviewed by The HistoryMakers on August 5, 2012.

## **Related Entries**

**Cornell University** [STUDENTOF] [from ? to ?]

**B.S.** 

**Cornell University** [STUDENT**O**F] [from ? to ?]

M. Engr.

**Cornell University** [STUDENTOF] [from ? to ?]

Ph.D.

New Hampton School [STUDENTOF] [from ? to ?]

**High School Diploma** 

Jefferson Middle School Academy [STUDENTOF] [from ? to ?]

La Salle Elementary School [STUDENTOF] [from ? to ?]

**Bell Laboratories** [EMPLOYEEOF] [from 1991 to 1995]

#### Member of the Technical Staff

Howard University [EMPLOYEEOF] [from 1988 to ?]

#### **Professor, Department of Electrical Engineering**

**Cornell University** [EMPLOYEEOF] [from 1999 to ?]

#### **Professor Department of Electrical Engineering**

American Vacuum Society [MEMBEROF] [from ? to ?]

## Institute of Electrical and Electronics Engineers (IEEE) [MEMBEROF]

[from ? to ?]

#### Materials Research Society [MEMBEROF]

[from ? to ?]

**Electronic Materials Conference Organizing Committee** [MEMBEROF] [from 1994 to 2011]

**Conference Committee** 

**Compound Semiconductor Symposium Organizing Committee** [MEMBEROF] [from 1994 to 1998]

#### Member

**Program Committee American Vacuum Society** [MEMBEROF] [from 2010 to 2011]

Member