

# Finding Aid to The HistoryMakers® Video Oral History with Daniel Akins

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## Overview of the Collection

<b>Repository:</b>	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
<b>Creator:</b>	Akins, Daniel L.
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Daniel Akins,
<b>Dates:</b>	May 15, 2012
<b>Bulk Dates:</b>	2012
<b>Physical Description:</b>	6 MOV HD video files (2:39:11).
<b>Abstract:</b>	Chemist and chemistry professor Daniel Akins (1941 - ) , an expert on nanomaterial, is the director of the CUNY Center for Analysis of Structures and Interfaces. was interviewed by The HistoryMakers® on May 15, 2012, in Teaneck, New Jersey. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2012_109
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Physical chemist and chemistry professor Daniel Akins was born on July 8, 1941, in Miami, Florida, and graduated from Booker T. Washington High School in 1960. Akins earned his B.S. degree in chemistry from Howard University in 1963 where he was inducted into Sigma Xi honor society. He received his Ph.D. degree in physical chemistry from the University of California, Berkeley, in 1968 under the mentorship of Professor C. Bradley Moore.

After finishing his graduate education, Akins worked at Florida State University as both a postdoctoral researcher at the Institute for Molecular Biophysics and visiting assistant chemistry professor. In 1970, he became an assistant professor in the chemistry department at the University of South Florida and was promoted to associate professor in 1975. Between 1977 and 1979, Akins served as a visiting program director of the physical chemistry subsection of the dynamics program at the National Science Foundation (NSF). After a brief period as a senior scientist with the Polaroid Corporation, he began his career at The City College of New York as a professor of chemistry in 1981. In 1988, Akins founded and served as director of what would become in 2000 the CUNY Center for Analysis of Structures and Interfaces (CASI), which has the goal of training minority scientists in high-level scientific research. Eleven years after establishment of CASI, he was awarded an NSF Integrative Graduate Education and Research Traineeship (IGERT) grant. In 2008, Akins became the principal investigator for a \$5 million NSF grant to establish a center for nanostructure applications known as CENSES (Center for Exploitation of Nanostructures in Sensors and Energy Systems). Throughout his career, he has published more than 130 research papers in leading scientific journals. His principal research focuses on the development of new nanomaterials for use in molecular photonic devices (MPDs), chemical sensors and fuel cells.

Akins is a member of several professional organizations, including the American Chemical Society, the Society for Applied Spectroscopy, and NOBCCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers). Throughout his career, Akins has shown a continued commitment to increasing diversity in the sciences and has mentored many doctoral students. For his work, Daniel has been

recognized many times, including being named a Sigma Xi Distinguished Lecturer and receiving the CCNY Faculty Service Award. In 2000, Akins received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) from President Bill Clinton. Daniel Akins lives in Teaneck, New Jersey with his wife Sondra Akins. They have two children, Dana, a mechanical engineer, and Meredith, an actress and dancer.

Daniel Akins was interviewed by The HistoryMakers on May 15, 2012.

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## Scope and Content

This life oral history interview with Daniel Akins was conducted by Larry Crowe on May 15, 2012, in Teaneck, New Jersey, and was recorded on 6 MOV HD video files. Chemist and chemistry professor Daniel Akins (1941 - ), an expert on nanomaterial, is the director of the CUNY Center for Analysis of Structures and Interfaces.

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## Restrictions

### Restrictions on Access

Restrictions may be applied on a case-by-case basis at the discretion of The HistoryMakers®.

### Restrictions on Use

All use of materials and use credits must be pre-approved by The HistoryMakers®. Appropriate credit must be given. Copyright is held by The HistoryMakers®.

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## Related Material

Information about the administrative functions involved in scheduling, researching, and producing the interview, as well as correspondence with the interview subject is stored electronically both on The HistoryMakers® server and in two databases maintained by The HistoryMakers®, though this information is not included in this finding aid.

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## Controlled Access Terms

This interview collection is indexed under the following controlled access subject terms.

### Persons:

Akins, Daniel L.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

### Subjects:

African Americans--Interviews

Akins, Daniel L.--Interviews

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## Organizations:

HistoryMakers® (Video oral history collection)

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The HistoryMakers® African American Video Oral History Collection

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## HistoryMakers® Category:

ScienceMakers

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EducationMakers

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## Administrative Information

### Custodial History

Interview footage was recorded by The HistoryMakers®. All rights to the interview have been transferred to The HistoryMakers® by the interview subject through a signed interview release form. Signed interview release forms have been deposited with Jenner & Block, LLP, Chicago.

### Preferred Citation

The HistoryMakers® Video Oral History Interview with Daniel Akins, May 15, 2012. The HistoryMakers® African American Video Oral History Collection, 1900 S. Michigan Avenue, Chicago, Illinois.

### Processing Information

This interview collection was processed and encoded on 8/2/2013 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

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## Other Finding Aid

A Microsoft Access contact database and a FileMaker Pro tracking database, both maintained by The HistoryMakers®, keep track of the administrative functions involved in scheduling, researching, and producing the interview.

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## Detailed Description of the Collection

### **Series I: Original Interview Footage, May 15, 2012**

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_001, TRT: 1:29:56  
2012/05/15

Daniel Akins talks about his family background. His mother, Clementina Smith, was born in Miami, Florida in 1927. Her family is from the Bahamas,

Haiti and Nicaragua. Clementina was a hairstylist who owned her own parlor in Miami. His father, Daniel Thomas Akins Jr., was born in Miami, Florida in 1924. After he returned from the war, his parent's never reunited. He was primarily raised by his grandmother, Merlice Smith, in Overtown, Florida.

African American families--Florida.

African American business enterprises--Beauty shops--Florida--Miami.

African American soldiers--Family relationships.

Grandparents as parents--Florida--Miami.

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_002, TRT: 2:29:20  
2012/05/15

Daniel Akins grew up in a neighborhood called Overtown in Miami, Florida. Akins enjoyed painting and drawing. After his grandmother dissuaded him from a career as an artist, he abandoned it to pursue a career as an academic. He attended Phyllis Wheatley Elementary School and Frederick Douglass Elementary School. Akins' favorite subjects in grade school were art and mathematics. He describes his experience at Booker T. Washington High School.

Childhood--Florida--Miami--1940-1960.

African American grandmothers--Attitudes--Florida--Miami.

Artists.

African American children--Education--Florida--Miami--1940-1960.

African American high school students--Florida--Miami--1950-1960.

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_003, TRT: 3:30:02  
2012/05/15

Daniel Akins graduated from Booker T. Washington High School in 1959 and he went on to attend Howard University in Washington, D.C. on a scholarship. Initially intent on majoring in physics, he ended up in the chemistry department due to an administrative mishap. He graduated with his B.S. degree in chemistry in 1963. During his time at Howard, he was a member of the Omega Psi Phi Fraternity and the Sigma Xi Honor Society. While at Howard, he met his wife, Shondra Akins and they married a year later, in 1964. Akins attended the University of California in Berkeley, California for graduate school where he pursued a doctorate degree in physical chemistry.

Howard University--Scholarships.

Howard University--Curricula.

Chemistry--Study and teaching (Higher).

Howard University--Married students.

Mentoring in science--Education, Higher--United States.

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_004, TRT: 4:30:36  
2012/05/15

Daniel Akins attended the University of California in Berkeley, California to obtain his Ph.D. degree in physical chemistry. His basic research centered on determining the intermolecular potential function between colliding molecules. He completed the program at Berkeley in 1968 and continued his post-doctoral studies with a molecular biophysicist at Florida State University in Tallahassee, Florida. He became an assistant professor there and transferred to the University of South Florida in Tampa, Florida, where he became an associate professor. He then did research at the Polaroid Corporation for a year, becoming the first and only black chemist in the research department. He then

worked at the City Colleges of New York, where he developed a theory called AERS.

University of California, Berkeley. Department of Chemistry.

Universities and colleges--Florida.

African Americans--Doctoral students--Chemistry.

Polaroid Corporation--Employees--History.

Raman spectroscopy.

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_005, TRT: 5:29:36  
2012/05/15

Daniel Akins worked at the City Colleges of New York as a professor of chemistry and engineering from 1981. His biography was published in 1995 in a book by Beatrice Lumpkin called 'Math: A Rich Heritage'. He discusses his awareness of the challenges that face up-and-coming minorities in academia, especially in science and technological development. In 1999, he developed the Integrative Graduate Education and Research Traineeship program, a program targeted toward minorities to give them the opportunity to obtain a Ph.D. in nanotechnology. He received the 'Presidential Award of Excellence in Science, Mathematics, and Engineering Mentoring' in 2000.

City University of New York.

African American chemists--Biography.

Minorities in science--Education, Higher--United States.

Affirmative action programs--Education, Higher.

Nanotechnology.

Video Oral History Interview with Daniel Akins, Section A2012\_109\_001\_006, TRT: 6:09:41  
2012/05/15

Daniel Akins enjoys playing tennis. He has two daughters with his wife, Shondra Akins: Dana Lamar, who is a mechanical engineer; and Meredith Ivy, who is a singer and dancer. He describes his family photographs.

Tennis.

African American families--Daughters.

Photograph collections.