

# Finding Aid to The HistoryMakers® Video Oral History with Sossina Haile

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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>	Haile, Sossina M.
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Sossina Haile,
<b>Dates:</b>	November 29, 2012
<b>Bulk Dates:</b>	2012
<b>Physical Description:</b>	6 uncompressed MOV digital video files (2:43:58).
<b>Abstract:</b>	Chemical engineer Sossina Haile (1966 - ) is the Carl F. Braun Professor of Materials Science and Chemical Engineering at the California Institute of Technology (Caltech) and has developed new ways of using solar energy to make fuels. Haile was interviewed by The HistoryMakers® on November 29, 2012, in Los Angeles, California. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2012_197
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Professor of Materials Science and Chemical Engineering Sossina Haile was born on July 28, 1966 in Addis Adebaba, Ethiopia. After her family left Africa during an uprising in the 1970s, Haile grew up in Minnesota. She attended the Massachusetts Institute of Technology where she received her B.S. degree in 1986. She went on to receive her M.S. degree from the University of California, Berkeley and her Ph.D. degree from the Massachusetts Institute of Technology in 1992. While in school, Haile received the AT&T Cooperative Research Fellowship and the Fulbright Fellowship to continue her studies. The Fulbright, along with a Humboldt Fellowship the following year, allowed her to study at the Max Planck Institute für Festkörperforschung in Germany.

Upon receiving her Ph.D. degree, Haile assumed an assistant professorship at the University of Washington, Seattle where she stayed until 1996 when she joined the faculty at the California Institute of Technology. Her research group investigates ionic conduction in solid materials with applications to batteries and fuel cells. Haile is known for her work with the latter - in the 1990s she fabricated the first solid-acid fuel cell in her lab, regarded as a gateway to more powerful, commercial cells. In comparison to other fuel cells, Haile's is unique for its creation of energy at hot enough to be efficient, but not so hot as to be expensive. In 2003, two of her graduate students created *Superprotonic*, a company focused on fuel cells, with Haile as science adviser. Most recently, Haile has received recognition for developing new ways of using solar energy to make fuels like hydrogen and methane.

Haile is the recipient of the NSF National Young Investigator Award (1994-1999) and the 2001 J.B. Wagner Award from the High Temperature Materials Division of the Electrochemical Society. *Newsweek* Magazine named her one of "12 people to watch in 2008," and in 2010, Haile won both the Chemical Pioneer Award of the American Institute of Chemists and the Chow Foundation Humanitarian Award.

Haile lives with her two children and spouse in southern California.

Haile was interviewed by *The HistoryMakers* on November 29, 2012.

# Scope and Content

This life oral history interview with Sossina Haile was conducted by Larry Crowe on November 29, 2012, in Los Angeles, California, and was recorded on 6 uncompressed MOV digital video files. Chemical engineer Sossina Haile (1966 - ) is the Carl F. Braun Professor of Materials Science and Chemical Engineering at the California Institute of Technology (Caltech) and has developed new ways of using solar energy to make fuels.

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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:

Haile, Sossina M.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews

Haile, Sossina M.--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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### Occupations:

Chemical Engineer

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### HistoryMakers® Category:

ScienceMakers

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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 Sossina Haile, November 29, 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 5/30/2023 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

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_001, TRT: 1:29:47 ?  
Sossina Haile describes her family background. Her mother, Misrak Haile, was born in Addis Ababa, Ethiopia in 1950. Her family is from the Andhra ethnic group. After two years of college, she married and worked as a secretary at the U.S. Embassy before the family's move to the U.S. Haile's father, Getatchew Haile, was born in T'ut'e, Ethiopia in 1935. He studied theology at the Coptic Theological College and linguistics at the American University in Cairo, Egypt.

He earned his Ph.D. degree in Semitic philology at the Eberhard Karls Universitat Tubingen in Germany. Haile also talks about Ethiopian history and political relations between Italy and Ethiopia.

Families--Africa, North.

Fathers--Education--Africa, North.

Semitic philology--Study and teaching (Higher).

Ethiopia--History--20th century.

Ethiopia--Foreign relations--Italy.

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_002, TRT: 2:28:44 ?

Sossina Haile spent the first ten years of her life living in Ethiopia and attended the Jack and Jill Preschool and Sanford English School. Although the culture did not facilitate a friendly relationship between the students and the teachers, Haile was a good student and enjoyed all of her subjects. The political environment in Ethiopia was very tough during her years there. Haile's father, Getatchew Haile, was an outspoken critic of the dictatorship government. An order was sent out for his arrest, but after resisting, he was severely wounded. She describes her memories of living in Ethiopia before her family's fled to the U.S in 1976.

Childhood--Ethiopia.

Teacher-student relationships--Africa, North.

Ethiopia--Politics and government--20th century.

Fathers--Political and social views--Africa, North.

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_003, TRT: 3:28:46 ?

In 1974, Sossina Haile's father, Getatchew Haile, was shot in Ethiopia. He recovered, but was confined to a wheelchair. As a result of political unrest, Haile's father left Ethiopia. Haile joined her father in the United States in 1976, and her family settled in central Minnesota. She noted many cultural differences in the United States, including the role of children and the employment of servants. These were further exaggerated because she was unfamiliar with pop culture. Haile was also bullied in school, but Haile's parents played an instrumental role in her adjustment process, and they always remained positive. When she reached high school, Haile participated in many extracurricular activities and demonstrated an early interest in science. Her chemistry, physics, and math teachers all made a positive impact on her during her. Haile completed St. John's High School in 1983.

Ethiopia History 1974-

Parents with disabilities.

United States--Emigration and immigration.

Bullying in schools.

Student adjustment--United States.

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_004, TRT: 4:29:29 ?

In 1983, Sossina Haile enrolled in the Massachusetts Institute of Technology (MIT), where she chose to study material science and engineering because of their many applications. At Massachusetts Institute of Technology, Haile was impressed by the faculty and students she encountered there. Gus Witt, her English teacher, made a particularly strong impact on her. Another faculty member, Gretchen Kalonji, was very politically active in issues around apartheid and South Africa, and this inspired Haile. After graduating from MIT, Haile worked at Bell Laboratories, where she was mentored by Bob Lodes. Haile was then awarded a Fulbright Fellowship. She went to Germany to work at the Max

Planck Institute, where she studied the electroconductivity of materials.  
Massachusetts Institute of Technology.  
Apartheid--South Africa--20th century.  
Bell Telephone Laboratories.  
Scholarships, fellowships, etc.  
Max Planck Institut für Festkörperforschung.

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_005, TRT: 5:29:38 ?

Sossina Haile conducted her doctoral research under the direction of Dr. Bernhardt Wuensch. Her objective was to synthesize new types of crystals, which could ultimately lead to more effective batteries. Haile completed the last year of her Ph.D. degree in Germany, and spent an additional year there as a Humboldt Fellow. In 1993, Haile returned to the United States and joined the faculty of the University of Washington. She then began working at the California Institute of Technology in 1997. She was awarded the National Science Foundation's Young Investigator Award for her research. In 2001, Haile's team created the first acid fuel cell. This groundbreaking research would also lead to the more efficient fueling of machines. In order to make this widely available, Haile's graduate students started the Superprotonic Company, which develops salt acid fuel cells. Haile is currently the advisor to this company.  
Wuensch, Bernhardt J.  
Scholarships, fellowships, etc.  
Universities and colleges--Faculty--United States.  
National Science Foundation (U.S.)--Awards.  
Fuel cells--Technological innovations.

Video Oral History Interview with Sossina Haile, Section A2012\_197\_001\_006, TRT: 6:17:34 ?

Sossina Haile talks about energy in the United States. Fuel cells offer quiet, efficient energy with no pollution, but are still too expensive to be widely used. Haile works with the company started by her graduate students, Safcell, to commercialize this new technology. Haile is concerned about the environment and feels that cleaner energy sources are needed. Thus, she continues her work to improve fuel cells. Haile notes the improvement and wider availability of electric cars, and feels that their release was delayed for financial reasons. She is also concerned about the economic disparity in African American communities. Haile considers the salt acid fuel cell, the solar cell, and the students that she has mentored to be her legacy. Haile is married, and has two sons. She would like to be remembered as someone with a high level of achievement and a high level of integrity.  
Fuel cells--Environmental aspects--United States.  
Fuel cells--Economic aspects.  
Work and family.  
Academic achievement.