



Presidential Events Honoring

Dr. Percy Lavon Julian

The First African American Chemist Member of the
National Academy of Sciences

Symposium, Luncheon, and
Showing of NOVA Film Excerpt

Celebrating the forthcoming release of
Dr. Julian's Film Biography,

"Forgotten Genius"

232nd National Meeting of the American Chemical Society,
San Francisco, CA

Monday, September 11, 2006 • Hilton San Francisco Hotel





Percy Lavon Julian (1899–1975)

Percy Lavon Julian was a trailblazing synthetic chemist, a successful industrial research director, and a wealthy businessman, notwithstanding the prejudices and discrimination of his time. He was born in Montgomery, AL, on April 11, 1899, the son of a railway clerk and the grandson of slaves. From the beginning, he did well in school, but there were no public high schools for African Americans in Montgomery. Dr. Julian graduated from an all-Black normal school inadequately prepared for college. Even so, in the fall of 1916, at the age of 17, he was accepted as a sub-freshman at DePauw University. Thus, in addition to his regular college courses, he took classes at a nearby high school. He also had to work to pay his college expenses. Nevertheless, he excelled. Dr. Julian was elected to Phi Beta Kappa and graduated with a B.A. degree in 1920 as valedictorian of his class. His chosen path of chemistry would prove to be a rocky one. With no encouragement to continue his education and having been denied a fellowship to pursue graduate work, he found a position as an instructor in chemistry at Fisk University in Nashville, TN.

After two years at Fisk, Dr. Julian won an Austin Fellowship to Harvard and received his M.A. degree in 1923. Again, he faced disappointment in being denied the opportunity to pursue his doctorate at Harvard. He eventually joined the staff of predominantly Black institutions, first at West Virginia State College and, in 1928, as head of the department of chemistry at Howard University in Washington, DC. In 1929, Dr. Julian received a Rockefeller Foundation grant and the opportunity to earn his doctorate. He elected to study natural products chemistry with Ernst Späth at the University of Vienna.

He received his Ph.D. in 1931 and returned to Howard, accompanied by his friend, Josef Pikl. After two years, however,

internal politics forced them to leave. In 1933, through the efforts of his former professor William Blanchard, Dr. Julian returned to DePauw University as a research fellow. He taught advanced courses in organic chemistry and directed research projects for senior chemistry majors. It was here in Minshall Laboratory in 1935, in

collaboration with Pikl, that he completed the research that would result in the total synthesis of physostigmine. This work established Dr. Julian's reputation as a world-renowned chemist at age 36.



Despite his accomplishments as a recognized and published researcher, Percy Julian was denied a faculty position at DePauw. Frustrated in his efforts to gain an academic post, Dr. Julian turned to industry. One research job fell through because of a

town law forbidding "housing of a Negro overnight." Then, in 1936, a door opened when Dr. Julian was offered a position as director of research for soya products for Glidden in Chicago, IL. Over the next 18 years, the results of his soybean protein research produced numerous patents and successful products for Glidden, among them a paper coating and a fire retardant foam used widely in WWII to extinguish gasoline fires. His biomedical research made it possible to produce large quantities of synthetic progesterone and hydrocortisone at low cost.

In 1953, he established Julian Laboratories, a successful enterprise that he sold for more than \$2 million in 1961. He later formed the Julian Research Institute, a nonprofit research organization. Among his many lifetime honors was election to the National Academy of Sciences in 1973. He was also widely recognized as a steadfast advocate for human rights. Dr. Julian continued his private research studies and served as a consultant to major pharmaceutical companies until his death on April 19, 1975.



Symposium

“Dr. Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer”

Hilton San Francisco Hotel, *Yosemite A*

Symposium Organizer: **Dr. James Shoffner**

Morning Session

Introductory Remarks

Dr. James P. Shoffner,

Adjunct Professor, Columbia College; Past Member of ACS Board of Directors

8:30 AM

Welcome

Dr. E. Ann Nalley

President, American Chemical Society

8:35 AM

Percy Lavon Julian: Pursuit of Excellence—A Life-Long Journey

Dr. Arnold L. Hirsch

President, AgD Nutrition

8:40 AM

Working for Dr. Julian: An Everyday Experience

Dr. James C. Letton

Research Associate., Procter & Gamble, Retired

9:20 AM

Percy L. Julian: A Review of His Contributions to the Synthesis and SAR of Steroid Hormones

Dr. Robert Aslanian, Sr.

Schering-Plough

9:50 AM

Alkaloid and Steroid Chemistry of Percy L. Julian

Dr. Ned Heindel

ACS Past President, Professor, Lehigh University

10:20 AM

Dr. Julian as Educator and Humanist

Dr. James P. Shoffner, Adjunct Professor, Columbia College;

Dr. Billy Joe Evans, Professor Emeritus, University of Michigan

10:50 AM

Percy L. Julian: Changing the Face of Science

Dr. Willie Pearson Jr.,

Georgia Institute of Technology

11:20 AM

Joseph S. Francisco

Joseph S. Francisco completed his undergraduate studies in chemistry at the University of Texas at Austin with honors and received his Ph.D. in Chemical Physics at the Massachusetts Institute of Technology (MIT) in 1983. From 1983-85, Dr. Francisco was a Research Fellow at Cambridge University in England, after which he returned to MIT as a Provost Postdoctoral Fellow.

In 1986, Dr. Francisco was appointed Assistant Professor at Wayne State University. In 1991, he was a Visiting Associate in Planetary Science at California Institute of Technology. He accepted an appointment as Professor of Chemistry and Earth & Atmospheric Sciences at Purdue University in January 1985. In 2006, he was appointed as the William E. Moore Distinguished Professor of Earth and Atmospheric Science and Chemistry at Purdue University.

Dr. Francisco has received a National Science Foundation Presidential Young Investigator Award, an Alfred P. Sloan Fellowship, and a Camille and Henry Dreyfus Foundation Teacher-Scholar Award. He also received the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers Outstanding Teacher Award. In 1993, Dr. Francisco was a recipient of a John Simon Guggenheim Fellowship, which he spent at the Jet Propulsion Laboratory at the California Institute of Technology. He received an American Association

for the Advancement of Science Mentor Award in 1994, a Percy L. Julian Award for Pure and Applied Research from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCCHE) in 1995, and was a Sigma Xi National Lecturer from 1995 to 1997. He was also elected a Fellow of the American Physical Society and a Fellow of the American Association for the Advancement of Science.



He was recently awarded an Alexander von Humboldt U.S. Senior Scientist Award by the German government, as well as being appointed as a Senior Visiting Fellow at the Institute of Advanced Studies at the University of Bologna, Italy. He has been appointed to and served on committees for the National Research Council, National Science Foundation,

American Chemical Society, and National Aeronautics and Space Administration. He was appointed by the Secretary of the Navy to serve as a member of the Naval Research Advisory Committee for the Department of Navy from 1994-96. He also served as a member of the Editorial Advisory Boards of *Spectrochimica Acta Part A* and *Advances in Environmental Research*. He is a co-author of the textbook *Chemical Kinetics and Dynamics*, published by Prentice-Hall. In total, he has published more than 370 peer-reviewed publications in the fields of atmospheric chemistry, chemical kinetics, quantum chemistry, laser photochemistry, and spectroscopy. He is the current President of NOBCCHE.



Committee on Minority Affairs Luncheon

Monday, September 11, 2006

Hilton San Francisco Hotel,
Continental Parlor 1/2
12:00 PM

Welcome and Introductions

Dr. Linette M. Watkins
Chair, Committee on Minority Affairs

LUNCH

Introduction of Speaker

Dr. Catherine T. Hunt
President-Elect, ACS

Speaker

Dr. Joseph S. Francisco
William E. Moore, Professor of Chemistry Purdue University,
and President of the National Organization for the Professional
Advancement of Black Chemists and Chemical Engineers

Closing Remarks

Dr. Linette M. Watkins

Dr. Percy L. Julian, The ACS, and The Film, "Forgotten Genius"

In 1999, the Committee on Minority Affairs (CMA) presented a program in observance of the 100th Anniversary of the birth of Dr. Percy L. Julian, the eminent African American organic medicinal chemist. About that same time, the management team of NOVA, which produces award winning science and technology television films for PBS station WGBH in Boston, decided to produce biographies of four eminent, historically selected Einstein, Galileo, and Madame Curie. Upon hearing about the CMA program scheduled for March 22, 1999, Steve Lyons and Llew Smith, NOVA producers/directors, made plans to be in Anaheim for the 217th ACS National Meeting. After attending celebrations and additional observances at DePauw University, where Dr. Julian was honored with a National Historic Chemical Landmark for his physostigmine synthesis, and all-day symposium in his hometown of Chicago sponsored by the Chicago Section, there was no doubt as to who would be the subject of the fourth film biography.

Dr. Julian's achievements are legendary. After receiving his Ph.D. from the University of Vienna in 1931, he synthesized the glaucoma drug physostigmine, served as director of fine chemicals and food research for the Glidden Co., developed processes for the synthesis of steroid intermediates leading to cortisone and female hormones, and developed processes for the isolation from soybeans of pure soya protein, phosphatides, and lecithin for use as food products.

The soya protein was requisitioned by the Navy for use in fighting fires aboard ships and planes, saving thousands of lives. Dr.

Julian left Glidden in 1954 to establish his own laboratory, which he sold to SmithKline & French in 1961 for \$2.5 million. Along with having consulting arrangements with several major pharmaceutical companies, he went on to establish another research laboratory, which he headed until his death in 1975. Dr. Julian had more than 100 patents and 60 scholarly publications. He received 19 honorary doctorates and numerous other honors and awards. In 1998, he was recognized by Chemical & Engineering News as one of the "Top 75 Contributors to the Chemical Enterprise." He was honored by the U.S. Postal Service by the issuance of a commemorative stamp in the Black Heritage Series in 1993.

The film was produced by NOVA/WGBH, with some critical and timely support from the American Chemical Society. In a very real sense, we have come full circle as we gather in San Francisco at the 232nd ACS National Meeting to celebrate the making and showing of the film, titled "Forgotten Genius." The full-day symposium, "*Dr. Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer*," will conclude with 30 minutes of film excerpts. The film is scheduled to be shown nationally on Public Television on February 6, 2007. The symposium is a Presidential Event with significant collaboration with the Board Task Force on Percy Julian and numerous cosponsors.

Jim Shoffner,
Chair, Percy Julian Symposium Committee

Linette Watkins,
Chair, Committee on Minority Affairs



Symposium

“Dr. Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer”

Hilton San Francisco Hotel, *Yosemite A*

Symposium Organizer: **Dr. James Shoffner**

Afternoon Session

The Making of the Percy Julian Film

Introductory Remarks

Dr. William (Bill) Carroll

Past-President, American Chemical Society
2:00 PM

Introductory Remarks

Percy L. Julian, Jr.

Attorney, Julian & Associates
2:10 PM

Legacy of Percy Lavon Julian: DePauw University and Beyond

Dr. Neal B. Abraham

Executive Vice President, DePauw University
2:30 PM

Learning from Percy Julian's Life

Dr. John Theibault

Education Manager, Chemical Heritage Foundation
2:50 PM

The Percy Julian Film and the Goals of the Camille and Henry Dreyfus Foundation

Dr. Mark Cardillo

Executive Director, Dreyfus Foundation
3:10 PM

Sneak Preview of “*Forgotten Genius*”: An Excerpt from the Film Biography of the Life of Percy L. Julian

Llewellyn Smith, Stephen Lyons, Melanie Wallace, WGBH
3:30 PM

Showing of excerpt from the film “*Forgotten Genius*”

4:00 PM

Discussion

4:25 PM

Concluding Remarks

Dr. James P. Shoffner

4:45 PM

Acknowledgements

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GlaxoSmithKline
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ACS Division of Medicinal Chemistry
ACS Division of Chemical Education

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Society Committee on Education
Division of Chemical Education
Committee on Professional Training
Division of Analytical Chemistry
Division of the History of Chemistry
Division of Medicinal Chemistry
Ad hoc Committee on National Historic Chemical Landmarks
Committee on Patents & Related Matters
Committee on Project SEED
Committee on Public Relations & Communication
Women Chemists Committee
Younger Chemists Committee

for their leadership, cooperation and support of "Forgotten Genius,"

All who shared their stories and participated in the making of the film,
NOVA, WGBH, PBS, and
The Percy Julian Family

**for their scholarship, commitment, and warmth,
particularly thank each of the speakers.**

The film *"Forgotten Genius,"* will be broadcast nationally by NOVA/PBS on February 6, 2007 during the first week of Black History Month.

ACS will host a **Pre-Screening Celebratory Event** on January 23, 2007, at the National Academies of Science, Constitution Avenue, Washington, D.C.

You are cordially invited to attend the ACS event and view the NOVA broadcast.

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