

2020 DAVIDSON SCHOOL OF CHEMICAL ENGINEERING



OUTSTANDING CHEMICAL ENGINEER AWARDS

ALUMNI AWARDS | September 24, 2020

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Every year since 1988, the Davidson School of Chemical Engineering has recognized alumni who have achieved distinction as leaders while making significant contributions to their fields, thus reflecting the value of a chemical engineering degree. Over the years, only 156 of the School's alumni have been accorded this prestigious award. Tonight, the Davidson School of Chemical Engineering is proud to add John F. (Jack) Babbitt, Robert M. (Bob) Davidson, Robert F. (Bob) Walsh III, Dennert O. (Denny) Ware, and Xiaoping Yang as recipients of the Outstanding Chemical Engineer Award.

WELCOME

Andrea Copeland, Junior, Davidson School of Chemical Engineering

PRESENTATION OF AWARDS

Rajamani Gounder, Larry and Virginia Faith Associate Professor of Chemical Engineering

Julie C. Liu, Associate Professor of Chemical Engineering

AWARD RECIPIENTS

John F. Babbitt, Jr. (BSChE '48)

Dennert O. Ware (BSChE '64)

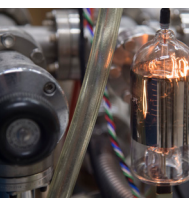
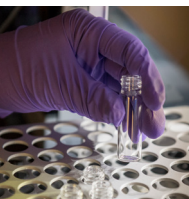
Robert M. Davidson (BSChE '64)

Xiaoping Yang (MSChE '88, PhD '90)

Robert F. Walsh III (BSChE '79)

CLOSING REMARKS

Sangtae Kim, Jay and Cynthia Ihlenfeld Head of Chemical Engineering



OUTSTANDING CHEMICAL ENGINEER AWARD PLAQUE

THE PLAQUE HONORING THE OUTSTANDING CHEMICAL ENGINEERS

This plaque was created in 1993 and has been awarded to all OChEs since then. Its centerpiece is a copy of the depiction of a sulfuric acid plant shown over the west entrance to Forney Hall. It represents the central and continuing role of chemical engineers in the design and operation of all aspects of chemical manufacturing. The computer screen in the lower right shows a differential equation. While it is meant to represent the fundamental modeling that chemical engineers do to extend fundamental understanding, explain observed phenomena and, most importantly, predict system behavior, the computer is also a reminder that chemical engineers use systems approaches to solve huge problems involving many variables and wide ranges of length and time scales. The double helix in the upper right represents the important role that chemical engineers are playing in the understanding and utilization of biological processes in medical and commercial applications. The artist's rendition of the polystyrene chain in the lower left is a reminder that chemical engineers continue to develop new understandings and new processes that support the property refinement and ongoing growth of polymeric materials and maintenance of polymers as a cornerstone of the chemical industry. The structure in the upper left is that of Y-zeolite, the key component in the fluid catalytic cracking of crude oil to make gasoline. It is a reminder that rate processes and their catalytic acceleration are central to a chemical engineer's ability to accomplish the chemical transformations that produce valuable products, improve the environment, and fuel the world economy.



JOHN F. BABBITT, JR. (BSCHE '48)



For his outstanding industry leadership, dedicated service to our country, and exemplary community involvement, the Davidson School of Chemical Engineering recognizes John F. Babbitt, Jr. as a 2020 Outstanding Chemical Engineer.

Jack Babbitt is a highly honored veteran, engineer, and community leader. Babbitt entered the military after graduating from high school, where he became a pilot, and achieved the rank of Captain in the United States Air Force. He had 30 missions in his B-17, with the final mission being a relief flight carrying food to the Dutch near the end of World War II.

After World War II, Babbitt enrolled at Purdue and graduated with a bachelor of science in chemical engineering in 1948. After graduating from Purdue, he began work on the Girdler and the Hydrogen Bomb project. Babbitt then joined the newly formed First Mississippi Corporation, becoming President of the company within two years. He later joined Agrico Chemical Company,

a subsidiary of The Williams Companies, as President, but left to form Devco International, Devco Overseas Company and several other personally owned companies which designed, built and operated facilities to process and market sulfur in the United States, Saudi Arabia and Australia.

In 2013, Babbitt received an Honorary Doctorate in Business from Hillsdale College. He has served on numerous boards, such as Hillcrest Medical Center, including a term as Chairman; a member of the board of The Master's College & Seminary in Santa Clarita, California; Chairman of the Fertilizer Institute, a national association of fertilizer and agrichemical producers; was active in the Boy Scouts; served as President of the Indian Nations Council and served as a member of the Boy Scouts National Council. Additionally, he has served as a member of the board of The Little Lighthouse, an organization dedicated to bringing children with special needs up to their greatest potential.

During his retirement, Babbitt found new ways to impact the community through philanthropy. He has supported many Christian missions and has been a driving force to establish churches internationally, demonstrating his continued commitment to improve the lives of others.

ROBERT M. DAVIDSON (BSChE '64)



For his tireless work to support profoundly gifted and intelligent middle and high school students; distinguished contributions to the patent law industry; and for his patriotic dedication to the Nevada Air National Guard, the Davidson School of Chemical Engineering recognizes Robert M. Davidson as a 2020 Outstanding Chemical Engineer.

Bob Davidson was born and raised on a farm in upstate New York. After high school he attended Purdue University graduating with a BSChE degree in 1964. He then joined the US Patent Office as a patent examiner and enrolled in The George Washington Law School, receiving his JD degree in 1967.

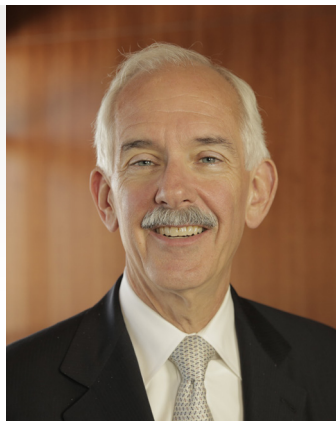
In 1970 he moved to Southern California and joined TRW as a patent attorney. In 1971 he enrolled in the business school of UCLA while working and received a MBA from UCLA in 1972. Bob became a Vice President of TRW in 1977, overseeing a group of companies.

In 1978 he joined The Parsons Corporation as Vice President and General Counsel. He acquired numerous companies for Parsons, was named Executive of the Year by Engineering News Record and was promoted to Executive Vice President overseeing many Parsons companies. In 1989 Bob left Parsons to become Chairman and CEO of Davidson & Associates, an educational software company founded by he and Jan (a 1966 Purdue graduate). The company grew rapidly, went public in 1993 and was sold to a NYSE company in 1998. Soon thereafter they retired to Incline Village Nevada to pursue charitable activities. Their primary interest was in the underserved cohort of profoundly gifted students 20% of whom were dropping out of school. Today the Davidson Institute for Talent Development is the leading organization supporting our nation's profoundly gifted children. Currently, it supports over 4000 students. Its activities include a scholarship program recognized as one of the most prestigious in the world, The Davidson Academy, recognized as the number one public secondary school in the US, and many other programs.

Bob has served on numerous corporate boards. In addition, he has served on the boards of KCET, Pepperdine University, The George Washington University, the University of Iowa Belin Blanc Center, the Nevada Board of Regents, the Nevada Policy Research Institute, the Nevada K-16 Educational Commission and the California/Nevada South Lake Tahoe Fire Commission. He received an honorary Doctorate degree from the University of Nevada.

Bob is proud to serve as the civilian Commander of the Nevada Air National Guard.

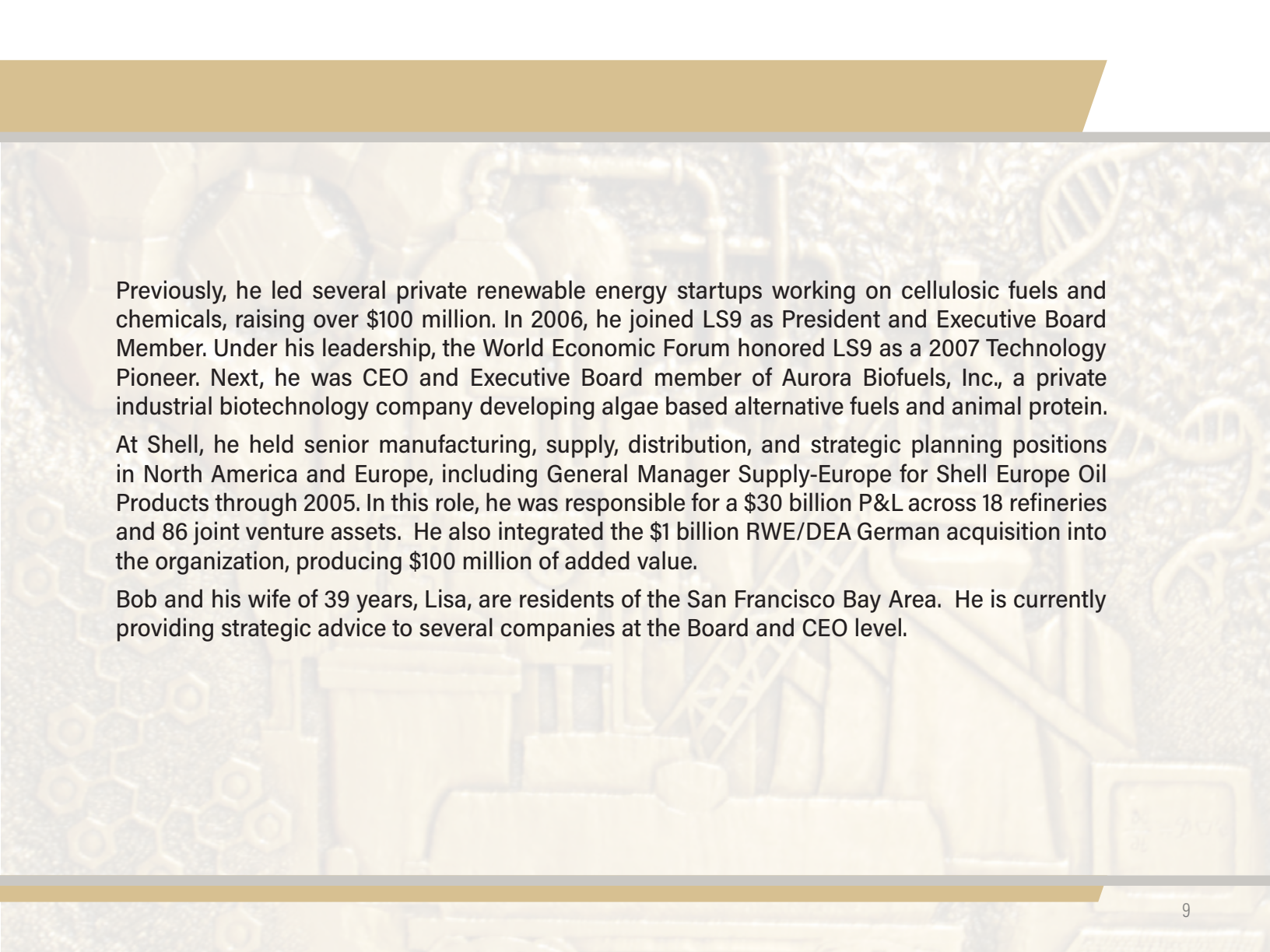
ROBERT F. WALSH III (BSChE '79)



For his distinguished contributions to the petroleum, chemical and industrial biotechnology industries; and for championing companies under his leadership to global recognition, the Davidson School of Chemical Engineering recognizes Robert F. Walsh III as a 2020 Outstanding Chemical Engineer.

Robert F. Walsh III earned his bachelor of science in Chemical Engineering from Purdue University in 1979. He spent the subsequent 40 years in the global petroleum, chemical and industrial biotechnology industries, including 26 years at Royal Dutch Shell.

Most recently, he was the Senior Vice President of Energy and President of the Industrial Products Division at Intrexon Corporation for six years. He was part of the team that took the company public in 2013. He also led private fund raising that brought in over \$75 million for project development at the company.



Previously, he led several private renewable energy startups working on cellulosic fuels and chemicals, raising over \$100 million. In 2006, he joined LS9 as President and Executive Board Member. Under his leadership, the World Economic Forum honored LS9 as a 2007 Technology Pioneer. Next, he was CEO and Executive Board member of Aurora Biofuels, Inc., a private industrial biotechnology company developing algae based alternative fuels and animal protein.

At Shell, he held senior manufacturing, supply, distribution, and strategic planning positions in North America and Europe, including General Manager Supply-Europe for Shell Europe Oil Products through 2005. In this role, he was responsible for a \$30 billion P&L across 18 refineries and 86 joint venture assets. He also integrated the \$1 billion RWE/DEA German acquisition into the organization, producing \$100 million of added value.

Bob and his wife of 39 years, Lisa, are residents of the San Francisco Bay Area. He is currently providing strategic advice to several companies at the Board and CEO level.

DENNERT O. WARE (BSChE '64)



For distinguished contributions to the medical devices industry through the exceptional application of engineering principles and entrepreneurship, the Davidson School of Chemical Engineering recognizes Dennert O. Ware as a 2020 Outstanding Chemical Engineer.

Dennert Ware entered Purdue University in 1960. His experiences over the next four years formed a platform that guided the rest of his life. Earning a degree in Chemical Engineering at Purdue took him through a complex process of structuring problems that guided his professional development.

Upon obtaining his degree in 1964, he joined fellow Purdue graduate John Buehler (BSME 1933) as an Electron Beam Welding Engineer at the Buehler Corporation, a major subcontractor producing aerospace components for the defense industry. As the Viet Nam War wound down in the early 70's, so did the demand for large numbers of military helicopters. His experience in manufacturing critical components within a highly regulated industry where quality was

paramount provided a pathway for him to change industries and enter the field of orthopedic devices at DePuy, a division of Bio-Dynamics. Opportunities abounded in the rapidly expanding medical devices industry. Over the next 30 years he held positions of increasing responsibility culminating with the position of CEO, Roche Diagnostic Corporation, the North American arm of the diagnostic chemistry business after it acquired Boehringer in 1998.

In 2000, he was asked to use his experience leading a small device company in Texas, Kinetic Concepts, Inc, into an exciting high potential market opportunity in wound healing. His experience in applying his engineering principles coupled with his MBA, acquired along the way, provided planning and execution to commercialize a novel device and take it from about \$50 million in revenue to over \$1 billion. Far more importantly, over seven million patients who suffered from severe acute and chronic wounds have been treated to date. More than 90% have had their lives or limbs saved or their quality of life dramatically improved.

Today, Mr. Ware owns Mission Point Resort on Mackinac Island, MI, and sits on the Boards of Christel House International and Haven for Hope. In 1993, he was named Distinguished Graduate of Broad Ripple High School in Indianapolis, Indiana. He was awarded Ernst and Young's Entrepreneur of the Year for the Houston and Gulf Coast Region and Frost and Sullivan's CEO of the Year for Medical Devices in 2006 and he was elected to the Texas Business Hall of Fame in 2016.


XIAOPING YANG (MSChE '88, PhD '90)



For distinguished contributions in international executive roles in the energy sector; for extraordinary strategic business development and technology innovation; and for her commitment as a global leader, the Davidson School of Chemical Engineering recognizes Xiaoping Yang as a 2020 Outstanding Chemical Engineer.

Xiaoping Yang most recently served as Chairman and President of BP China for almost four years. After graduating from Purdue University, she held a variety of international executive roles at BP in the U.S. and Asia locations responsible for strategic business development, operations, sales and marketing, and technology innovation.

Xiaoping chaired BP China 's executive committee, leading the development of BP's strategic proposition in China, expanding core energy business footprints of \$7 billion in assets, and progressed new strategic ambitions in renewable energy and other new energy frontiers in the Country.



She worked in the U.S. for 14 years, followed by 16 years of various senior executive positions in Asia, including General Manager and Board director of the Retail Joint Venture, President of BP Asia Aromatics, Chairman of BP Zhuhai Chemical Company, Commissioner of BP Indonesia Chemical Company, and Board Director of BP Hong Kong Trading Limited. She also had a senior executive role where she was responsible for business of billion dollars of turnover business and managed a major divestment project.

With a commitment to global business leadership, Xiaoping served as Vice Chairman of China British Business Council and as an advisory board member for universities and associations.

For her contributions in business, she received several distinguished honours, including Outstanding Business Female by Forbes China 2019; Woman of Year 2020 by Entrepreneur Magazine's Business; and 2020 Top Global Female Influencers in Energy by Oil and Gas Councils.

Xiaoping received an MBA from the University of Chicago.

PREVIOUS OUTSTANDING CHEMICAL ENGINEER AWARD RECIPIENTS

Albert Bernard 1988

Robert Bringer 1989

Robert Henson 1989

William Schmitt 1989

William Madar 1990

Robert Postlethwait 1990

Norman Pruitt 1990

Donald Hannemann 1991

Linda Huff 1991

Rohit Khanna 1991

Alan Fox 1992

Robert LaFortune 1992

S. George Bankoff 1993

William Bares 1993

Andrew Barnes 1993

Robert Becherer 1993

Donald Brophy 1993

Bernard Butcher 1993

John Ciborski 1993

Alexander Clarke 1993

Robert Covalt 1993

Robert Forney 1993

Robert Gadomski 1993

Bruce Gonser 1993

Frederick Haas 1993

William Harris Jr. 1993

James Henderson 1993

John Hesselberth 1993

Thomas Hodgson 1993

John Horner 1993

Harold Hunsicker 1993

Roberto Lee 1993

A. W. Lutz 1993

John Lux 1993

J. Timothy McGinley 1993

Roger Moser 1993

Gordon Mounts 1993

Randall Murill Jr. 1993

Paul Oreffice 1993

Donald Orr 1993

Michael Ramage 1993

Henry J. Ramey Jr. 1993

Robert Reid 1993

Harold Ritchey 1993

John Roorda 1993

Samuel Salem 1993

Dave Schornstein 1993

James Schorr 1993

Yen-Ping Shih 1993

John Siegesmund 1993

Edward Steinhoff 1993

Miller Swaney 1993

Joseph Temple Jr. 1993

Francis Theis 1993

Vern Weekman 1993

Maynard Wheeler 1993

Robert Wheeler 1993

Robert Winslow 1993

William Wishlinski 1993

Jamie Wisniak 1993

Deborah Grubbe 1994

Richard Hazleton 1994

Lowell Koppel 1994

Philip Krug 1994

John Lillich 1994

Joe Stewart 1994

William Young 1994

R. William Eykamp 1995

Che-I Kao 1995

Craig McLaughlin 1995

William Smith 1995

Robert Buckman 1996

Ching-Tien Liou 1996

David Rea 1996

Thomas Storer 1996

S. Margaret Willoughby 1996

Frank Becker 1997

Andrew Crowe 1997

Eleftherios Papoutsakis 1997

Guy Camarata 1998

PREVIOUS OUTSTANDING CHEMICAL ENGINEER AWARD RECIPIENTS

Charles Kline 1998
Todd Gehr 1999
Stanley Gembicki 1999
Richard Grabham 1999
Emily Liggett 1999
David Pershing 1999
Robert Davis 2000
Abbie Griffin 2000
Robert Hannemann 2000
Robert McNeeley 2000
Max Downham 2001
Donald Dunner 2001
Jeffrey Hemmer 2001
Jay Ihlenfeld 2001
Brian Stutts 2001
Michael Graff 2002
Donald Lamberson 2002
Michael Ott 2002
Nicholas Peppas 2002
Ellen Tobias 2002

Paul Dickensheets 2003
Ben Lipps Jr. 2003
Tom Maliszewski 2003
Joseph S. Alford, Jr. 2004
Susan Hardman 2004
Rick Roberts 2004
Lloyd Robeson 2004
Charles Davidson 2005
Robert Weist 2005
Arindam Bose 2005
Michael Ladisch 2006
James Rust 2006
James Stake 2006
Pierre Latour 2007
Duncan Mellichamp 2007
Antonios Mikos 2008
Gary Poehlein 2008
Roberta Gleiter 2008
Henry Sampson 2009
Mary Ellen Weber 2009

Norman Gilsdorf 2010
William Greer 2010
Harold Igdaloff 2010
Peter Kraemer 2010
James Hoover 2011
Gerald Skidmore 2011
Kristi Anseth 2012
William Clark 2012
Bruce Dale 2012
Marilyn Glenn Forney 2012
Gregory Lewis 2012
Richard Narta 2012
Steven Swanson 2012
Jennifer Sinclair Curtis 2013
Ronald Unnerstall 2013
Richard Korsmeyer 2014
Rob Crane 2014
Jefferson C. Lievense 2014
Stephen R. Murrill 2014
Norm Kidder 2015

John Klier 2015
Seung Bin Park 2015
Julia Myers Ross 2015
Charles E. Smith 2015
Vijay Swarup 2015
Christopher N. Bowman 2016
Steven D. Perry 2016
Kimberly K. Underhill 2016
David H. Li 2017
William C. Nelson 2017
Stephen R. Cornell 2018
Prasenjeet Ghosh 2018
Marcy Ziek 2018
Mitchel Papanicolas 2019
Craig Smith 2019
Kristin Thunhorst 2019

