2023

OUTSTANDING CHEMICAL ENGINEER

AWARDS



Davidson School of Chemical Engineering thursday SEPTEMBER 14, 2023

OUTSTANDING CHEMICAL ENGINEER AWARDS

PROGRAM

Welcome Remarks

Sydney N. Hummel, Chemical Engineering Student Ambassador

Dinner

2023 Honorees Presentation of Awards

Carrie L. (Byrnes) Anderson | BSChE 1991 Michael A. Klobuchar | BSChE 1998 Kyle P. Kostroski | BSChE 2004 | PhD 2008 Amy L. Roth | BSChE 1991

Closing Remarks

Sangtae Kim, Distinguished Professor and Jay and Cynthia Ihlenfeld School Head Davidson School of Chemical Engineering



OUTSTANDING CHEMICAL ENGINEERS PLAQUE FORNEY HALL, WEST ENTRANCE

PLAQUE HONORING THE OUTSTANDING CHEMICAL ENGINEERS

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.

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.

a chemical engineering degree. Over the years, only 150 of the School's alumni have been accorded this prestigious award. Tonight, the Davidson School of Chemical Engineering is proud to add Carrie Anderson, Michael Klobuchar, Kyle Kostroski and Amy Roth as recipients of the Outstanding Chemical Engineer Award.



Carrie L. (Byrnes) Anderson

BSChE 1991

Chief Financial Officer | Campbell Soup Company

For an impressive career in corporate finance reflecting a broad base of global experience in multiple industrial end markets.

CARRIE L. (BYRNES) ANDERSON never envisioned her chemical engineering degree would lead to a Chief Finance Officer role, but that's exactly how her trajectory unfolded.

As an undergraduate, Anderson quickly transitioned from her small all-female high school to the fast-paced and academically challenging environment at Purdue. With help from a supportive network within the Davidson School of Chemical Engineering, she excelled academically, graduating with highest distinction.

While at Purdue, she completed a five-session co-op program with General Motors, and after graduation accepted an engineering role with the company. While at General Motors, she earned her MBA from Ball State University and transitioned into quasi-technical and financial roles, later transitioning fully into finance, progressing through investor relations, treasury, business unit finance and controllership roles. She has also held finance leadership roles with Integra LifeSciences, Dover Corporation, and Delphi Corporation, now known as Aptiv Corp.

In January 2023, Anderson was appointed Executive Vice President and Chief Financial Officer at Campbell's where she leads the finance function, including controllership, corporate financial planning and analysis, corporate strategy and development, tax, treasury, internal audit, investor relations, transactional services and information technology. She also serves as a member of the board of directors for Embecta Corporation.

Anderson credits her participation in Purdue's co-op engineering program with teaching her very early in her career the value of project ownership and time management, honing presentation and critical thinking skills, and understanding the importance of financial acumen. She credits the program and experiences in providing career clarity, as well as boosting her confidence and self-efficacy – knowing she had the skills, knowledge, and capabilities to be successful in different situations and roles. While in the program she also made lifelong friendships that continue to this day.

"My chemical engineering degree and years at Purdue prepared me for so much more beyond gaining technical competency in the field," Anderson says. "Through my undergraduate experience, I learned to believe in myself, surround myself with talented people, to advocate for myself and my abilities and reach for and expect success."



Michael A. Klobuchar

BSChE 1998

Executive Vice President and Chief Strategy Officer | Merck & Co. Inc.

For an unrelenting commitment to applying leading-edge science to save and improve lives worldwide.

MICHAEL A. KLOBUCHAR was the only student to raise his hand in a freshman chemistry lecture hall, volunteering to participate in a study designed to explore the cognitive steps required to acquire new knowledge, specifically within chemistry and chemical education. That bold move led to a series of events that would shape his engineering career, including publishing his undergraduate research with his friend and longtime mentor, the late George Bodnar, emeritus professor of chemistry.

"Dr. Bodnar believed in me more than I believed in myself," Klobuchar says. "That feeling has been a source of unparalleled energy and inspiration for me throughout my career. As a leader, seeking to recreate this feeling in others is the single most important thing I can do as an executive today."

As executive vice president and chief strategy officer for Merck, Klobuchar leads the advancement and execution of the company's strategy, with additional responsibility for business development and information technology. Prior to this role, he was senior vice president and finance lead for Merck Research Laboratories, the company's research and development organization.

He began his career at Merck in 1998 as a synthetic process development engineer supporting new pipeline candidates within Merck Research Laboratories and has since held key technical, operational and financial roles across several areas of the company.

Klobuchar's advice to students: "Personal discomfort is always the necessary precursor to real self-development. Don't be afraid to move toward discomfort and fight the inherent tendency to run. Live within this margin of discomfort. It will accelerate your development, both professionally and personally."



Kyle P. Kostroski

BSChE 2004 | PhD 2008

Vice President, Engineering, Prioritization and Planning | BP

For his development of forward-thinking strategies to transform the energy industry's efforts to address the need for secure, affordable and lower carbon resources.

KYLE P. KOSTROSKI began his engineering education as a high schooler, working in his parents' machine tool rebuilding company in Racine, Wisconsin. He enrolled at Purdue intending to pursue electrical engineering, but a knack for process engineering changed his mind. After earning his bachelor's in chemical engineering, he remained at Purdue for his graduate studies, completing a PhD under Phillip Wankat, Distinguished Professor Emeritus of Chemical Engineering.

Now, as vice president for BP's engineering portfolio, Kostroski is accountable for prioritization of activities, integrated resource planning and delivery of financial and operational performance objectives. He joined BP in 2008 as a research engineer supervising plant technicians and was part of a team recognized with BP's Helios Award — the company's highest honor — for improving delayed coker reliability at the Whiting, Indiana, refinery.

During his 15 years at BP, Kostroski has held a number of roles of increasing responsibility in the technical, commercial and operations areas of the company's downstream. As a company executive, Kostroski leads a team responsible for optimizing the use of BP's most senior and distinct engineering capability group in group engineering to support global business in hydrocarbons production and refining, hydrogen and carbon capture, onshore and offshore wind, electrical vehicle charging, biofuels and more.

Through it all, he reflects on how his time at Purdue shaped his professional path.

"My Purdue chemical engineering experience taught me resilience in the face of a challenge," Kostroski says. "This, along with humility and grit, has helped me become a successful engineer and effective leader."



Amy L. Roth

BSChE 1992

Vice President, Environment Health and Safety | Terra-Gen, LLC.

For her commitment to sustainability and reducing the carbon footprint by providing clean, reliable and affordable energy to communities across the United States.

AMY L. ROTH recalls sitting in a freshman lecture hall during her first day of classes. The professor told students to "look around because at the end of the semester, two-thirds of the people in this room will be gone." When winter break rolled around, the students sitting on either side of Roth were, in fact, gone.

Roth persevered through an honors curriculum, even when she found the advanced engineering coursework in her junior and senior years to be much more challenging.

"An engineering degree is like a badge, I take it with me everywhere," Roth says. "As a woman with an engineering degree from Purdue, doors were opened for me that would not have been opened otherwise. A Purdue engineering degree shows that you are smart, committed and disciplined."

As vice president of health and safety at Terra-Gen, LLC, a renewable energy company focused on developing, owning and operating utility-scale wind, geothermal and solar generation, Roth is responsible for the company's environmental permitting and compliance, health and safety and environmental, social and governance (ESG) reporting.

Prior to joining Terra-Gen in March 2023, she was vice president of regulatory oversight for E&B Natural Resources, a private California-based oil and natural gas production company. She began her career at BP where she was selected for and participated in the company's leadership development program and successfully completed a four-year international assignment based in London.

PAST RECIPIENTS

Irene Binash

Patricia Herndon Harold Wright

Pedro Arce Rahul Kasat Kevin McCarter Diana Tucker Harrison

John F. Babbitt, Jr. Robert M. Davidson Robert F. Walsh III Dennert O. Ware Xiaoping Yang

Mitchel Papanicolas Craig Smith Kristin Thunhorst

Stephen R. Cornell Prasenjeet Ghosh Marcy Ziek

David H. Li

William C. Nelson

Christopher N. Bowman Steven D. Perry Kimberly K. Underhill

Norm Kidder John Klier Seung Bin Park Julia Myers Ross Charles E. Smith Vijay Swarup

Richard Korsmeyer Rob Crane Jefferson C. Lievense Stephen R. Murrill

Jennifer Sinclair Curtis Ronald Unnerstall

Kristi Anseth William Clark Bruce Dale Marilvn Glenn Fornev Gregory Lewis

Richard Narta Steven Swanson

James Hoover

Norman Gilsdorf

William Greer

Harold Igdaloff

Peter Kräemer

Henry Sampson

Antonios Mikos

Gary Poehlein

Roberta Gleiter

Pierre Latour

Duncan Mellichamp

Michael Ladisch

Charles Davidson

Joseph S. Alford, Jr.

Susan Hardman

Rick Roberts

Ben Lipps Jr.

Michael Graff

Michael Ott

Ellen Tobias

Donald Lamberson

Nicholas Peppas

Max Downham

Donald Dunner

Jeffrey Hemmer

Jay Ihlenfeld

Brian Stutts

Tom Maliszewski

Lloyd Robeson

Robert Weist

Arindam Bose

James Rust

James Stake

Mary Ellen Weber

Gerald Skidmore

1999

Todd Gehr Stanley Gembicki Richard Grabham Emily Liggett David Pershing

Robert Davis

Abbie Griffin

Robert Hannemann

Robert McNeeley

Guv Camarata Charles Kline

1997 Frank Becker Andrew Crowe **Eleftherios Papoutsakis**

Robert Buckman Ching-Tien Lio David Rea Thomas Storer S. Margaret Willoughby

R. William Eykamp Che-l Kao

Craig McLaughlin William Smith

1994

Deborah Grubbe **Richard Hazleton** Lowell Koppel Philip Krua John Lillich Joe Stewart William Young

Paul Dickensheets

S. George Bankoff William Bares Andrew Barnes Robert Beche Donald Brophy Bernard Butcher John Ciborski Alexander Clarke Robert Covalt Robert Forney Robert Gadomski Bruce Gonse Frederick Haas William Harris Jr. James Henderson John Hesselberth Thomas Hodgson John Horner Harold Hunsicker Roberto Lee A. W. Lutz John Lux J. Timothy McGinley Roger Moser Gordon Mounts Randall Murill Jr. Paul Oreffice Donald Orr Michael Ramage Henry J. Ramey Jr. Robert Reid Harold Ritchey John Roorda Samuel Salem **Dave Schornstein** James Schorr Yen-Ping Shih John Siegesmund Edward Steinhoff Miller Swaney Joseph Temple Jr. Francis Theis Vern Weekman Maynard Wheeler Robert Wheeler **Robert Winslow** William Wishlinski Jamie Wisniak

Alan Fox Robert LaFortune

Donald Hannemann Linda Huff Rohit Khanna

William Madar Robert Postlethwait Norman Pruitt

Albert Bernard **Robert Bringer** Robert Henson William Schmitt

PURDUE CHEMICAL ENGINEERS

CONTINUOUSLY

THE BOUNDARIES OF KNOWLEDGE

OUTSTANDING CHEMICAL ENGINEER

OUTSTANDING CHEMICAL ENGINEER



Davidson School of Chemical Engineering