



### **Dr. Valerie Reed**

Valerie Reed is currently the Deputy Director Bioenergy Technologies Office within the Office of Energy Efficiency and Renewable Energy at the Department of Energy. She held the position of Acting Director from 2011-2013 as well as Program Manager for Conversion Technologies prior to 2011.

Valerie has lead efforts on utilization of biomass for fuels and chemicals for over 21 years, resulting in significant cost reductions in the cost of cellulosic ethanol from approximately \$9/gal to current projected cost of \$2.15/gal. She has helped initiate research pathways that now include technologies that are projected to reduce the cost of diesel and jet fuel to <\$3/gal by 2017, and is actively working to demonstrate these technologies at commercial scale through the partnerships the Bioenergy Program supports. Valerie has been recognized for four consecutive years by Biofuels Digest's "Top 100 People in Bioenergy" for her roles to date.

Valerie holds a Ph. D. in Biochemistry from Georgetown University. In addition to her programmatic activities, Valerie is a founding member of the Metabolic Engineering Working Group which is an interagency effort to advance metabolic engineering technologies for industrial, agricultural and human needs and has co-chaired the Interagency Working Group on Conversion Technologies established through the Biomass R&D Board, to coordinate the Federal effort on Bioenergy.



## **James E. Anderson**

Technical Expert, Fuel Science

Dr. James Anderson is the Technical Expert in Fuel Science within the Research & Advanced Engineering organization at Ford Motor Company. He leads research on the physical, chemical, and environmental attributes of renewable and conventional fuels, and how these properties relate to engine performance and environmental impacts.

His recent research includes octane ratings and volatility of gasoline-alcohol blends, ignition quality of hydrocarbon and oxygenated fuels for diesel engines, and auto-oxidation of biodiesel-diesel blends. His research also includes studies of future opportunities and implementation issues associated with higher octane gasoline and higher renewable fuel content, global energy and CO<sub>2</sub> modeling, and assessments of various environmental and societal impacts of conventional and alternative fuel production and use.

Dr. Anderson has co-authored more than 40 journal articles and 2 book chapters. He is a member of the Society of Automotive Engineers and the American Chemical Society and is a licensed Professional Engineer.

### **Education**

B.S. in Civil Engineering, Stanford University

M.S. in Environmental Engineering & Science, Stanford University

Ph.D. in Civil Engineering, Stanford University

### **Ford**

Ford Motor Company, a global automotive industry leader based in Dearborn, Mich., manufactures or distributes automobiles across six continents. With about 224,000 employees and 90 plants worldwide, the company's automotive brands include Ford and Lincoln. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford and its products worldwide, please visit

<http://corporate.ford.com>.



**Tahmid Mizan**  
Senior Technology Advisor  
Corporate Strategic Planning  
ExxonMobil Corporation

Tahmid is the Senior Technology Advisor, Corporate Strategic Planning for ExxonMobil Corporation. He provides guidance to senior corporate officers in assessing strategic technology opportunities and challenges. He also manages the corporate R&D portfolio, which looks at technologies having long time horizons or in fields outside the company's immediate business focus.

Tahmid progressed through various management, technical, and planning assignments before assuming his current position. His assignments have included leading engineers and scientists engaged in building refinery processes models, developing new methods for producing ultra-low sulfur fuels and advantaged lubricant basestocks, improving the energy efficiency of refineries, and designing or troubleshooting chemical reactors.

Tahmid earned his PhD in Chemical Engineering from the University of Michigan, Ann Arbor. Prior to joining Exxon, he worked in academia as a Research Fellow and as a Lecturer. Tahmid has numerous refereed publications including in the AIChE Journal, Chemical Engineering Science, the Journal of Physical Chemistry, Energy & Fuels, and Catalysis Today. He is the inventor or co-inventor on several patents or patent applications.



### **Thomas W. Robb, Ph.D.**

Dr. Robb, is manager of Institutional Relations for Abengoa Bioenergy Corporation. From 1981 to 1984, Dr. Robb served as Assistant Professor with North Carolina State University and was stationed in Brazil as the leader of a collaborative research program.

In 1985, Dr. Robb joined IMC Corporation in its animal health division as International Technical Service Manager. He subsequently became Project Manager in Research and Development and then Business Unit Manager for all North American cow/calf products.

Dr. Robb joined Ivy Animal Health in 1999 where he led business development and acquisitions activities until 2000. In 2000, Dr. Robb joined a small start-up company (ImmTech) to lead bovine sales, marketing and technical services and joined Abengoa Bioenergy in 2004.

Dr. Robb is a graduate of the University of Missouri (M.S. Animal Husbandry 1977) and University of Kentucky (Ph.D. in Ruminant Nutrition, 1980).



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## **William L. Holstein**

### **Senior Research Associate, Central Research and Development**

William Holstein joined DuPont in 1982. He is currently the Technical Leader for DuPont's Energy Storage programs, where he is working to expand DuPont's materials offerings in lithium ion batteries and other advanced energy storage systems for transportation and electric grid applications.

Bill's 31-year career at DuPont has focused primarily on commercialization of new products and processes related to chemical intermediates, electronics and alternative energy, including photonic devices for fiber optic communications systems, superconducting thin films and devices, nylon intermediates, conversion of natural gas to hydrogen and liquid fuels, and fuel cells. He is the recipient of DuPont Engineering's Silver Medal for Technical Achievement and Engineering Excellence Awards. He is the author or coauthor of 80 scientific publications.

### **Education**

B.S.E. in Chemical Engineering, Princeton University  
M.S. in Chemical Engineering, Stanford University  
Ph.D. in Chemical Engineering, Stanford University

### **DuPont**

DuPont has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802. The company believes that by collaborating with customers, governments, NGOs, and thought leaders we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment.

DuPont Experimental  
Station E262/217  
PO Box 8352  
Wilmington, DE 19803-8352  
Phone: 302-695-1936



Joe Powell (Joseph B. Powell, Ph.D.) is an AIChE Fellow and Shell's Chief Scientist, Chemical Engineering. He joined the Process Development Department at what is now Shell Technology Center Houston in 1988, where he has led major R&D programs in new chemical processes, biofuels, and enhanced oil recovery, in addition to a Hunters innovation group. Dr. Powell has been granted more than forty-five U.S. patents (another 50+ pending) and several industry awards, including the A. D. Little Award for Chemical Engineering Innovation (AIChE 1998). He is co-editor and chapter author for the book ***Sustainable Development in the Process Industries: Cases and Impact***, John Wiley & Sons, New York (2010), and has served AIChE in various roles including division and meeting programming chair, operating council, pilot plants area chair, topical chair. Dr. Powell obtained a Ph.D. in Chemical Engineering from the Univ. of Wisconsin-Madison (1984), following a B.S. in Chemical Engineering from the Univ. of Virginia (1978).