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Victor Atiemo-Obeng

Scientist

The Dow Chemical Company

Dr. Victor Atiemo-Obeng, who currently holds the rank of Dow Scientist, is among the top 100 technical staff of The Dow Chemical Company, the biggest chemical company in North America. He serves on the leadership teams of the Process Sciences and Fluid Mechanics & Mixing disciplines within the Research & Engineering Sciences department of the company's Core Research and Development function. He provides leadership and technical consulting services to people working in the research, engineering, and manufacturing functions of The Dow Chemical Company on a wide variety of projects where he leverages his expertise in chemical process synthesis and development, scale-up, process engineering and fluid mechanics and mixing.

Dr. Atiemo-Obeng was a lead process engineer for several multimillion-dollar capital projects that were recognized with the company's Global Engineering Excellence Awards. He was a key contributor to the Global Project Methodology, Scale-up Checklist, and the Mixing Manual. Dr. Atiemo-Obeng is a co-editor as well as contributing author of several chapters of the world-acclaimed "Handbook of Industrial Mixing: Science and Practice" published in 2004 by John Wiley & Sons, Inc. Dr. Atiemo-Obeng was invited by the Board on Chemical Sciences and Technology of the National Academies to serve on the committee that organized the workshop which resulted in the publication "Sustainability in the Chemical Industry: Grand Challenges and Research Needs - A Workshop Report (2005)."

Dr. Atiemo-Obeng is an active senior member of the American Institute of Chemical Engineers (AIChE), the North American Mixing Forum (NAMF), and the National Organization of Black Chemist and Chemical Engineers. In AIChE he currently serves as the Dow Director for the Mid-Michigan Section. He previously served as the Chair of the section, and on the nominations committee of the national organization. He served on the NAMF Executive Board for several years.

Dr. Atiemo-Obeng holds a doctorate degree in Chemical Engineering from the University of Wisconsin, Madison, and a bachelor's degree in Chemical Engineering from The Catholic University of America, Washington, D.C.

Diane Bellis

Director, Federal Research Programs

AgSource

Upon earning her Ph.D. in chemistry from the New Mexico Institute of Mining and Technology, Dr. Diane Bellis was awarded an American Association for the Advancement of Science (AAAS) Diplomacy Fellowship to the U.S. Department of State. Upon completion of the Fellowship, she was the project geochemist for a National Aeronautics and Space Administration – U.S. Department of Agriculture (USDA)/Forest Service project assessing the biogeochemical impacts of agricultural fire on the atmosphere and biodiversity in the savannas of central Brazil. Later, she returned to Washington, D.C. As Agricultural Research Administrator in USDA/Foreign Agricultural Service, Dr. Bellis developed and managed international collaborative research programs to carry out USDA's mandate to strengthen agricultural systems, advance U.S. competitiveness, and promote the sustainable use of resources. She has represented USDA and the U.S. Government in multi-lateral negotiations including the Middle East Peace Process, in the

Asia-Pacific Economic Council (APEC), G7 Pilot Programme and on U.S. State Department lead science and technology delegations.

At present, Dr. Bellis is the Director of Federal Research Programs, for AgSource, Inc., Washington, D.C. In this position, she is responsible for identifying emerging technologies and opportunities that will increase the production, quality and/or demand for U.S. soybeans. For the more than 600,000 U.S. soybean farmers, she works to coordinate and align research resources of the federal government with the research funded by the farmers themselves. Dr. Bellis lives with her husband and their youngest son on a farm on the Little Kanawha River in West Virginia.

James L. Buizer

Senior Advisor to the President

Executive Director for Strategic Institutional Advancement, Office of the President
Arizona State University

Mr. James L. Buizer is Senior Advisor to Arizona State University (ASU) President Michael M. Crow and Executive Director for Strategic Institutional Advancement in the Office of the President. Mr. Buizer advances ASU through visioning, strategic direction, institutional positioning and the management of presidential investments, particularly those that are aimed at transforming ASU as a model for the New American University, an institution directly engaged in the economic, social, and cultural vitality of its region, and a university focused on building a sustainable environment and economy.

As Director of Strategic Institutional Advancement in the Office of the President, Mr. Buizer oversees transformative design efforts and development of new interdisciplinary academic units across the University. Until July 2007, he served as Executive Director of the Office of Sustainability Initiatives in the Office of the President, where he led the conceptualization, design and initiation of the University-wide Global Institute of Sustainability and its School of Sustainability, launched fall 2006 as the first of its kind in the world.

Prior to this, he served as Director of the Climate and Societal Interactions Office at the National Oceanic and Atmospheric Administration (NOAA) in Washington, D.C., where he was responsible for providing programmatic vision, design and leadership of NOAA's integrated, multidisciplinary research and applications program positioned at the climate and societal interface.

Mr. Buizer serves on numerous boards and leadership councils throughout the university. In his personal capacity, he serves on the Board of Directors of Second Nature; Member, National Academies of Sciences Study: America's Climate Choices, Panel on Adapting to Impacts of Climate Change; Member, Board of Directors, National Council for Science and the Environment, among others. Mr. Buizer has published extensively on institutionalizing the science-to-action interface, and upon invitation has served as reviewer of many University-based Sustainability programs across the United States. He received his degrees in Oceanography, Marine Resource Economics, and Science Policy from the University of Washington, Seattle, Washington.

Sandra Brasfield

Environmental Laboratory

U.S. Army Engineer Research and Development Center

Dr. Sandra Brasfield serves in the role of Research Biologist for the U.S. Army Engineer Research and Development Center (ERDC), Environmental Laboratory (EL), located in Vicksburg, Mississippi. Her key responsibilities are to propose, manage, execute, and report aquatic and terrestrial ecotoxicological research in support of military and civil projects for the Army Corps of Engineers and other entities. Since joining ERDC in November of 2005, Dr. Brasfield has acted as laboratory lead for several projects addressing the exposure and effect pathways for aquatic and terrestrial vertebrates and applying this information to environmental risk assessment. Dr. Brasfield received a bachelor's degree in Biology and Chemistry cum laude from Middle Tennessee State University in 1999. She earned a masters degree in Zoology and Environmental Toxicology from Oklahoma State University in 2002, working with a new reptile model for laboratory toxicology research. Dr. Brasfield completed her doctoral degree in Ecosystem Health Assessment as a member of the Canadian Rivers Institute from the University of New Brunswick, Saint John. Her doctoral research dealt with reduced reproductive activity with fish populations near agricultural activities. Current research includes assessing novel routes of exposure of military relevant compounds using a model laboratory reptile species, chemistry of emerging contaminants and climate change on military installations. Dr. Brasfield has published her research in leading journals such as Environmental Science and Technology, Environmental Toxicology and Chemistry, Chemosphere, and Zoo Biology.

Chad Haynes

Consultant

Booz Allen Hamilton

Dr. Chad Haynes' expertise spans hands-on experimental research, to Federal-level strategic planning and policy implementation. Since joining Booz Allen Hamilton, he has served as an energy consultant to the Department of Energy Advanced Research Projects Agency - Energy (ARPA-E), U.S. Biomass Research and Development Board, U.S. Air Force, and the U.S. Department of Agriculture Agricultural Research Service. In his current role, he serves as an on-site science & engineering technology advisor (SETA) to the DOE ARPA-E. In this position, he works directly with ARPA-E leadership and program management to develop and implement processes required to build the agency and achieve ambitious agency goals. Dr. Haynes is a lead technical SETA for bioenergy R&D for ARPA-E. Prior to joining Booz Allen Hamilton, he was a key member of the National Program Staff of the USDA Agricultural Research Service where he worked to enhance the effectiveness and scope of the agency's bioenergy research program. Dr. Haynes' work has been published in trade magazines and peer reviewed journals. He has a Ph.D. in Molecular and Cellular Biochemistry from the University of Kentucky, and a bachelor's degree in Biochemistry from Virginia Tech.

Carl Heltzel

Chief Technical Officer
National Institute for Hometown Security

Dr. Carl Heltzel served as the Director of Environmental Chemistry and Research at the Environmental Risk Management Consulting Company (ErMC2). Prior to that American Chemical Society (ACS) staff position, Dr. Heltzel was the Monroe Moosnick Professor of Chemistry at Transylvania University in Lexington, KY. While at Transylvania (1997-2005), Dr. Heltzel was awarded tenure one year early and was simultaneously awarded Transylvania's top teaching and service awards. From 2002 to 2004 he served as the Chemistry Program Director. Dr. Heltzel has taught large- and small-sized classes as an adjunct professor at the University of Hawaii, the University of Kentucky, and Chaminade University. Dr. Heltzel has used *Chemistry in Context* since he began teaching in 1997 and has co-authored the 5th and 6th editions of this best-selling textbook. Dr. Heltzel was a writing team leader for the NSF-funded textbook project Active Chemistry, an innovative curriculum for high school chemistry, published in 2006.

Dr. Heltzel served the ACS on a national level by participating on the Committee for Environmental Improvement and the Exam Committee. Being active in his local ACS section in Lexington, he served as secretary treasurer (1995-'97), Chair-elect (1998), Chair (1999), and finally, Councilor (2000-2004).

Dr. Heltzel did his undergraduate research in organometallic synthesis and earned a bachelor's degree from Radford University in Virginia. He took his Ph.D. from Virginia Tech in 1995 where his dissertation focused on the isolation, structure elucidation, and synthesis of natural products with anticancer potential. After working with terrestrial plants at Virginia Tech, Dr. Heltzel worked on marine organisms in Hawaii for a postdoctoral fellowship at the University of Hawaii. There he assisted in the early stages of the development of Cryptophycin, a natural product drug isolated from blue-green algae. Showing tremendous potential as an antitumor drug, the compound made its way up to Phase II human clinical trials.

Concepción "Conchita" Jiménez-González

Director and Team Leader of Operational Sustainability
GlaxoSmithKline

Dr. Concepción Jiménez-González is Director and Team Leader of Operational Sustainability at the Sustainability and Environment department of GlaxoSmithKline (GSK), where she is responsible for the development and deployment of global strategy and programs to integrate Sustainability into the GSK operations and product development.

She currently serves in the National Board of Directors of the Society of Hispanic Professional Engineers (SHPE) as National Vice-President. She has previously held other leadership positions in SHPE as regional Vice-President and at the local level.

She has been an active contributor in the fields of Green Chemistry and Engineering, Life Cycle Assessment, Sustainability, and the integration of EHS and chemical engineering to design more efficient, greener, safer processes. She routinely presents in scientific and business venues and publishes in recognized scientific and industrial publications. Dr. Jiménez-González has served as part of the U.S. EPA's Board of Scientific Counselors, Technology for Sustainability Sub-Committee.

Prior to joining GSK, she worked at the Environmental Quality Center and Chemical Engineering Department of ITESM (Instituto Tecnológico y de Estudios Superiores de Monterrey, México) as a program manager, full time researcher and project engineer, where she managed the system-wide Environmental Quality Centers Network (20 sites throughout México). She also worked as environmental engineer for GeoEnvironmental Consultants and was visiting researcher in Pfizer and SmithKline Beecham.

She holds a Ph.D. in Chemical Engineering from North Carolina State University; Raleigh NC; a master's degree in Environmental Engineering from ITESM; Monterrey, México and a bachelor's degree in Chemical and Industrial Engineering at the Chihuahua Institute of Technology, México. Following the Spanish tradition, she is also known as Conchita.

Ravi Malhotra

Founder and CEO
Clean Coal Briquette

Dr. Ravi Malhotra has over 20 years of experience as a social entrepreneur and engineer. He has established numerous social enterprises in the US, India, Africa and Asia with an emphasis on sustainable energy technologies. Mr. Malhotra has led award-winning research & development efforts including holding patents on some clean energy technologies and has successfully launched new products for a variety of industries including housing and energy. He is currently focused on incubating clean tech start-ups and is the Founder and:

- Chief Executive Officer of Clean Coal Briquette Inc., a start-up that recycles waste coal and mixes it with biomass to create a cleaner burning coal fuel substitute.
- Chairman of International Center for Appropriate & Sustainable Technology (iCAST), a non-profit agency developing new sustainable energy technologies and projects.
- Director of Mainstreet Power Company, a solar photovoltaic development firm focused on the public sector and low-income housing market.
- Director of National Energy Services Company, a turn-key energy service provider focused on energy efficiency technologies and services for the public sector
- Director of EEMAP Inc., an energy information provider with an emphasis on energy modeling and smart grid implementation

Mr. Malhotra holds a bachelor's degree in Engineering from the Indian Institute of Technology-Delhi, India and a master's degree in Engineering and Business Administration from the University of Texas at Austin. He was a member of the Western Governor Association's Solar and Bio-energy task forces that developed a plan to build 30,000 MW of clean energy in Western USA. Mr. Malhotra is the recipient of the 'Entrepreneur of the Year' award for 2009 from the City of Lakewood, Colorado.

Christiaan Morssink

Adjunct Assistant Professor of Nursing, School of Nursing
University of Pennsylvania

Dr. Christiaan Morssink holds Candidandus and Doctorandus degrees in cultural anthropology and non-Western sociology, respectively, from the University of Amsterdam in the Netherlands, a master of public health from Johns Hopkins, and a Ph.D. in Health Policy and Administration

from the University of Illinois at Chicago School of Public Health. Dr. Morssink has 30+ years of practice and teaching experience in public health and related fields in the Netherlands as well as in the Republic of Suriname, where he was head of the Department of Planning and Project Management in the Ministry of Health, and in the United States. His research and teaching interests include: professionalization, bridging social science and biomedicine, global health disparities, social inequality in labor markets and health markets, and multi-cultural communication, cooperation, intervention strategies. Dr. Morssink is a member of the American Public Health Association, the World Future Society, and he currently serves as Treasurer and Board Member at the Philadelphia Global Water Initiative.

John Oldfield

Executive Vice President
Water Advocates

Mr. John Oldfield is currently Executive Vice President with Water Advocates - an advocacy group in Washington DC dedicated to increasing financial and political support for worldwide access to safe, affordable and sustainable supplies of drinking water and adequate sanitation. Prior to Water Advocates he was a Vice President at a New York private equity firm specializing in leveraged buyouts and corporate divestitures. Mr. Oldfield has also been with The Conference Board, a New York-based economic research firm which produces the well-known Leading Economic Indicators and Consumer Confidence Index. While there he launched and managed two innovative online services, including a corporate training business. Prior to The Conference Board, Mr. Oldfield was with the National Academy of Sciences, where he researched science, technology and economic policy issues. He also has extensive international management experience with U.S. Agency for International Development and U.S. Department of State contracts, including training programs for election officials and foreign media, as well as civil/military communication projects in post-conflict countries.

Jeffrey Steiner

Senior Advisor for Bioenergy
USDA

Dr. Jeff Steiner comes to the Office of the Chief Scientist from the Agricultural Research Service where he was a member of ARS Bioenergy National Program leadership team, with responsibility for coordinating sustainable feedstock production research, including ways to incorporate bioenergy production into existing agricultural systems without disrupting food, feed, and fiber markets and while enhancing natural resources quality.

Dr. Steiner was the principal co-author of the President's Interagency Biofuels Working Group, Biofuels Report, and is responsible for coordinating bioenergy research across all of U.S. Department of Agriculture (USDA), including the establishment of the USDA's Regional Biomass Research Centers. Dr. Steiner also leads the Agricultural Biomass Opportunities Assessment Team for Hawaii that is determining the feedstock production options for meeting the Navy's biofuel targets for the Great Green Fleet.

Dr. Steiner received his bachelor's and master's degrees from California State University-Fresno, and the Ph.D. from Oregon State University. He is a Fellow of the American Society of Agronomy and Crop Science Society of America.

Thomas Stephens
Graduate Student
University of Michigan

Dr. Thomas Stephens is a graduate student at the University of Michigan (making a mid-career change in career focus) researching sustainable transportation options. At Michigan, he developed an agent-based model of a population of plug-in hybrid vehicle drivers and projected energy use and life-cycle emissions under various policy and market scenarios. Dr. Stephens is also interested in renewable energy, alternative fuels, industrial ecology and the assessment of the environmental performance of new technologies from a systems perspective.

Prior to returning to school, Dr. Stephens worked 20 years as a chemical engineer/polymer scientist in research and development for Los Alamos National Laboratory and the Naval Air Warfare Center. He developed new material formulations, manufacturing processes, and evaluated new materials for specialized applications. He also conducted one of the earliest life-cycle assessments of ordnance production. Finally, he developed and qualified substitute cleaning solvents and replacement materials used in defense production and assembly processes that were safer and more environmentally benign.

Dr. Stephens completed his Ph.D. in chemical engineering from the University of Massachusetts at Amherst, and bachelor's degree in chemical engineering from the University of Texas at Austin.

Rosemarie Szostak
Analyst
Nerac

Dr. Rosemarie Szostak advises companies on technology and innovation in materials, energy and sustainable design. With more than 20 years of experience as a thought leader and analyst with broad technical knowledge, she provides innovative solutions to difficult technology challenges. Before joining Nerac, Dr. Szostak managed the Philip Morris USA Environmental Footprint Program, assessing corporate operational environmental sustainability needs and leading efforts to reduce the company's environmental footprint. Dr. Szostak also was a program manager for defense sciences at the U.S. Department of Defense's Defense Advanced Research Projects Agency (DARPA), where her role was to identify and advance radically new technologies that promised to enhance national security and lead to revolutionary new military capabilities. She was a professor in the Clark Atlanta University Department of Chemistry and a principal research scientist at the Georgia Tech Research Institute. Dr. Szostak earned her doctoral degree in chemistry at University of California Los Angeles and was a post-doctoral fellow in chemical engineering at Worcester Polytechnic Institute.

Maggie Walser

Associate Program Officer
Board on Atmospheric Sciences and Climate
National Academy of Sciences

Dr. Maggie Walser is an Associate Program Officer with the Board on Atmospheric Sciences and Climate (BASC) at the National Academy of Sciences. Prior to joining BASC, she was the AGU/AAAS Congressional Science and Engineering Fellow, working with the majority staff of the Senate Committee on Energy and Natural Resources. During her Fellowship, Dr. Walser worked on a variety of energy issues with the committee, but her main focus was the energy/water nexus, including water demands of traditional and renewable energy resources, produced water issues, shale gas development, desalination, carbon capture and sequestration, and water efficiency and conservation. Prior to her selection as the AGU Fellow, Dr. Walser served as a post-doctoral fellow at the National Council for Science and the Environment (NCSE) in Washington, D.C., where she played a leading role in the programs of NCSE's Center for Science Solutions, served as the lead editor for the Climate Change Collection of the Encyclopedia of Earth and the National Program Coordinator for EnvironMentors. Dr. Walser received bachelor's degrees in Chemistry and Chemical Engineering from the University of California, Irvine. She also completed her Ph.D. in Chemistry at the University of California, Irvine. Her research focused on the composition and photochemistry of secondary organic aerosol, as well as measurement of biogenic emissions of atmospherically-relevant trace gases.

Jaime Van Mourik

Higher Education Sector Manager
U.S. Green Building Council

As the Higher Education Sector Manager at the U.S. Green Building Council, Ms. Jaime Van Mourik guides colleges and universities through the green building planning process and the implementation of the LEED Green Building Rating System®. In this role, she directs the development of tools and resources for the sector and maintains customer relations for the Council's Portfolio Program pilot.

Prior to joining USGBC, Ms. Van Mourik worked as a project manager at GreenShape, a sustainable design consulting firm, assisting over 30 projects pursuing LEED certification. From 2002-2007, Ms. Van Mourik worked at the National Building Museum developing, implementing and managing educational programs about the built environment for an adult audience. The programs included lectures and films associated with the exhibition *The Green House: New Directions in Sustainable Architecture and Design*. Ms. Van Mourik has taught design to students of all ages including collegiate teaching positions at the Catholic University of America School of Architecture and Planning and Northern Virginia Community College.

Ms. Van Mourik is an active member of the building industry community and serves on the The Washington D.C. Chapter of the American Institute of Architects (AIA/DC) Inter-School Design Competition Committee. She was involved in the 2005, 2007 and 2009 Solar Decathlon serving as a communications juror. Ms. Van Mourik is an Associate AIA member and LEED Accredited Professional. She holds a Bachelor of Architecture degree from Virginia Tech and a Master of Architectural History degree from the University of Virginia.