



BIOMASS 2014:
GROWING THE FUTURE
BIOECONOMY

July 29–30, 2014

Washington, D.C. Convention Center

**Breakout Speaker
Biographies**

Contents

Breakout Session I

Karl Seck 3

David C. Carroll..... 4

Joel Velasco 5

Timothy Volk 6

Kevin Comer 7

Kevin L. Kenney 8

Chris Daly 9

Brian West..... 10

Tom Leone 11

Ryan Haerer 12

Jim Williams 13

Chris Cassidy 14

Theodora Retsina 15

Breakout Session II

Randy Cortright..... 16

Raymond G. Wissinger 17

Santosh Gangwal..... 18

Andrew Held 19

John D. Trawick 20

Jennifer B. Dunn..... 21

Ken Williams..... 22

Brent Shanks 23

John Eichberger..... 24

Rob Underwood 25

Shannon Baker-Branstetter 26

Michael Wang 27

Stephen S. Kelley..... 28

Reid Miner..... 29

David Cleaves 30

Breakout Session III

Lauren Fillmore 31

William Eleazer..... 32

James R. Oyler..... 33

Todd Williams 34

José A. Olivares 35

John A. McGowen 36

Kimberly Ogden 37

Martin Sabarsky 38

Dennis Hall 39

Gerard Ostheimer 40

Cora Dickson 41

Arnaldo Vieira de Carvalho 42

Artur Milanez 43

Ashlie B. Delshad..... 44

Linda Silverman..... 46

Jason Miner..... 47

Liv Haselbach..... 48

Karl Seck

President and Chief Executive Officer, Mercurius Biofuels



Karl Seck has spent most of his career in the petroleum refining field as a process engineer. He has held design, technical services, optimization, and operations management positions with three oil companies. Karl started his own process consulting service eight years ago. He received a Bachelor of Science in chemical engineering from the University of Kansas.

David C. Carroll

President and Chief Executive Officer, Gas Technology Institute



David C. Carroll has been the President and Chief Executive Officer of Gas Technology Institute (GTI) since August 2006. Mr. Carroll oversees GTI's operations and directs its programs for developing technologies, products, and services that create exceptional value for customers in the natural gas industry and related industries. Mr. Carroll joined GTI in 2001 as Vice President of Business Development. From 1996–2001, he served at Praxair, Inc.—as Director of Business Development from 1999–2001 and as General Manager of a strategic business unit from 1977–1999, directing a 70-person staff in sales, marketing, engineering, financial, and technical service functions. Mr. Carroll held positions of increasing responsibility with Liquid Carbonic Industries, a subsidiary of Chicago Bridge & Iron from 1994–1996, where he directed energy supply efforts, and with Air Products and Chemicals, Inc. from 1980–1994. Mr. Carroll currently serves as Director of GTI. He has also been Director of Changing World Technologies, Inc. since November 2006 and a director of National Fuel Gas Company since June 7, 2012, and a director of CrystaTech Inc. He is a member of the Society of Gas Lighting, and serves as Director of Versa Power Systems, a developer, manufacturer, and distributor of solid oxide fuel cell (SOFC) systems. He also served as Director of WestStart/CALSTART. Mr. Carroll earned a Bachelor of Science degree in chemical engineering from the University of Pittsburgh and a master's degree in business administration from Lehigh University. He has also completed the Stanford Executive Program at Stanford University's Graduate School of Business.

Joel Velasco

Senior Vice President, Amyris



Joel Velasco has been Senior Vice President at Amyris, Inc. (a.k.a Amyris Biotechnologies, Inc.) since January 2011 and is Lead for investor relations, external communications, and public policy. In addition, Mr. Velasco provides advice and assistance in executing Amyris' expansion plans in Brazil and with regard to other strategic partnerships globally. Mr. Velasco serves as Senior Advisor of Latin America at Albright Stonebridge Group. Mr. Velasco has broad experience advising clients on Latin America strategies. He served as Managing Director of Stonebridge International. He served as Senior Advisor to the U.S. Ambassador to Brazil and as a personal aide to Vice President Al Gore in the White House. Mr. Velasco served as Special Assistant to the U.S. Ambassador to Brazil. He worked on a broad spectrum of issues ranging from trade to regional security. Mr. Velasco also worked at Simon Strategies. For more than three years as Chief Representative in North America for the Brazilian Sugarcane Industry Association (UNICA), he led its efforts to expand the North American biofuel and sugar markets. Mr. Velasco received an M.A. from the Georgetown University School of Foreign Service, focusing his studies on the political-economy of the Southern Cone, and a B.A. in political science from Hampden-Sydney College in Virginia.

Timothy Volk

Senior Research Associate, State University of New York—College of Environmental Science and Forestry



Dr. Timothy Volk has more than 25 years of experience working in the fields of forestry, agroforestry, short-rotation woody crops, bioenergy, and phytoremediation in the Northeastern United States and in West Africa. He holds degrees from the University of Guelph (B.S.; Guelph, Ontario) in Natural Resources Management, Cornell University (M.S.; Ithaca, New York) in Forest Science, and The State University of New York College of Environmental Science and Forestry (SUNY-ESF) (Ph.D.; Syracuse, New York) in Forest and Natural Resources Management. He is currently a senior research associate at the SUNY-ESF in Syracuse, New York, and co-director of the SUNY Center for Sustainable and Renewable Energy. He is responsible for a series of research projects focused on the development of shrub willow biomass cropping systems as a feedstock for bioproducts and bioenergy and the use of willow as an alternative cover for industrial waste sites. He is also actively involved in research and development of sustainability assessments of bioenergy systems, life-cycle assessments of willow biomass crops and woody biomass from forests, assessments of woody biomass availability from natural forests, economic modeling of short-rotation woody crops, living snow fences, regional woody biomass resource supplies, and harvesting systems for short-rotation woody crops.

Kevin Comer

Associate Principal, Antares Group Inc.



Mr. Kevin Comer is a mechanical engineer and associate principal of the Antares Group with more than 20 years of professional engineering and management experience. Mr. Comer is currently leading Antares' efforts on two multi-year Department of Energy Feedstock Logistics projects. The first project has developed innovative harvesting and logistics equipment that will reduce the delivered cost of biomass feedstocks. Through this project, Antares supported the harvest of miscanthus, switchgrass, and corn stover, gaining key knowledge about supplying agricultural biomass more efficiently at a commercial biorefinery scale. For this project, Mr. Comer has coordinated and managed a large and diverse project team composed of equipment manufacturers, feedstock consumers, government entities, and feedstock producers. Mr. Comer has also served as a lead component of a project team that conducted a test burn of coal and switchgrass at one of the largest coal-fired power plants in Iowa. This test involved the largest amount of power ever generated (18 MW) at a given time in the United States using a biomass energy crop as fuel. Mr. Comer had the lead responsibility for collecting data and test samples throughout the testing; leading the analysis, reporting, and presentation of emissions, efficiency, plant performance, and other test results for the project; and leading environmental permitting efforts.

Kevin L. Kenney

Director, Biomass Feedstock National User Facility, Idaho National Laboratory



Kevin Kenney is the Director of the Biomass Feedstock National User Facility at Idaho National Laboratory (INL). In this role, he is focused on establishing lab/industry partnerships through deployment of INL capabilities in biomass characterization, logistics, and preprocessing to address technology and risk barriers of bioenergy industry partners. Kevin's applied engineering research experience includes high-speed imaging, sensing, and autonomous control in various industrial applications ranging from automotive manufacturing to agricultural machinery operations. Over the last 10 years, he has applied this expertise in research and development of biomass feedstock supply and logistics systems—particularly in biomass harvest, collection, and storage—that address feedstock cost, quality, and quantity challenges for bioenergy production.

Chris Daly

Director, PRISM Climate Group, Oregon State University



Dr. Christopher Daly is Professor and founding Director of the PRISM Climate Group in the College of Engineering at Oregon State University. Daly's professional background spans a unique combination of disciplines, including meteorology and climatology, geography, vegetation ecology, and process and statistical modeling. Drawing from this background, he has advanced an emerging discipline termed "geospatial climatology," the study of the spatial patterns of climate and their relationships with geographic features. He produces USDA's official climate maps, including the 2012 Plant Hardiness Zone Map, and his spatial climate datasets are used by thousands of analysts and researchers worldwide. Daly's group has served as the DOE Sun Grant Western Region GIS Center since 2007, and he has worked closely with the USDA's Risk Management Agency since 2010. A common focus of his work for these two agencies is the development of nationwide maps that describe the potential productivity patterns of important biomass feedstocks. These maps provide spatially-explicit information on expected long-term average biomass yields required by a wide range of planning activities, from optimal refinery siting to large-scale economic analyses and forecasts.

Brian West

Deputy Director, Engines and Emissions Research Center, Oak Ridge National Laboratory



Brian West is Deputy Director of the Fuels, Engines, and Emissions Research Center at Oak Ridge National Laboratory (ORNL). His research at ORNL has involved vehicles, fuels, engines, and emissions control technologies. Brian's work with Lean NO_x Traps was cited by EPA in the 2000 diesel sulfur rule, which required refiners to lower diesel sulfur concentration from below 500 ppm to below 15 ppm beginning in 2006. More recently, Brian helped lead portions of DOE's Intermediate Ethanol Blends Program, which enabled EPA's approval of the waiver allowing E15 to be used in 2001 and newer vehicles. In addition, EPA adopted ORNL-developed vehicle emissions calculations for ethanol blends in the Tier 3 regulations, which will require emissions certification using E10 fuel beginning in 2017.

Brian joined ORNL in 1988 after receiving B.S. and M.S. degrees in Mechanical Engineering from Clemson University and Virginia Tech, respectively. Brian is a fellow of the Society of Automotive Engineers, where he is active as an author and organizer.

Tom Leone

Technical Expert, Powertrain Evaluation and Analysis, Ford Motor Company



Tom Leone is a technical expert for powertrain evaluation and analysis in Ford's Research and Advanced Engineering organization. He has worked at Ford since 1990 in a variety of roles, including engine dynamometer development, calibration of engine control systems, computer simulation, and fuel economy analysis or powertrain technologies. He has written numerous technical papers, and he holds more than 100 U.S. patents related to engines and fuels.

Ryan Haerer

**Program Analyst, Alternative Fuels, Office of Underground Storage Tanks,
Environmental Protection Agency**



Ryan Haerer joined Environmental Protection Agency's (EPA's) Office of Underground Storage Tanks (UST) in August 2013 as a program analyst focusing on biofuels and their effects on UST systems. Prior to joining the EPA, Ryan served in the U.S. Army as a combat medic, deploying to Iraq in 2005–2006. Originally from Dayton, Ohio, Ryan graduated from Ohio State University, and holds an M.A. in Energy Resources and Environment from Johns Hopkins School of Advanced International Studies (SAIS).

Jim Williams

Senior Manager, American Petroleum Institute



Jim Williams is Senior Downstream Manager at the American Petroleum Institute (API), Washington, D.C., responsible for managing the technical and policy issues in API's fuels, refining, and marketing programs. Jim joined API in 1986 and has held his current position since 2004. Jim received a Bachelor of Science in mechanical engineering technology from Virginia Tech in 1975 and a master's degree in energy resources from the University of Pittsburgh's School of Engineering in 1983. Upon graduation from Virginia Tech, Jim worked for Westinghouse Electric (now Northrup Grumman) in Baltimore, Maryland, as an environmental test engineer specializing in quality and reliability testing of radar systems for the Department of Defense. He started work in the oil industry in 1980 at Gulf Oil's Research and Development Company, Pittsburgh, Pennsylvania, doing fuels and lubricants product research and development.

Chris Cassidy

Program Director, Advanced Research Projects Agency-Energy, U.S. Department of Energy



Chris Cassidy is the National Business Renewable Energy Advisor for U.S. Department of Agriculture's (USDA's) national office in Washington, D.C. He formerly served as the Regional Renewable Energy Coordinator for the Western and Pacific Region, the Director of Business and Cooperative Programs for USDA Rural Development, and was the USDA Renewable Energy Coordinator for Washington State. He served on the task forces that designed, implemented, and provided technical reviews for the Renewable Energy Sections of the 2002, 2008, and 2014 Farm Bills.

Cassidy has been actively engaged in business, agriculture, technology, and renewable energy development activities for four decades. He has served the United States government, the United Nations, the Cooperative Bank, and the World Bank in technical management capacities in Africa, Asia, Europe, and South America. He has served the indigenous people of the Native American, Alaskan, and Hawaiian communities in renewable energy, economic, and agriculture development, and remains active in community development activities.

Cassidy completed his studies and undergraduate and graduate degrees in business, international development, and agriculture in Louisiana, Europe, and California.

Theodora Retsina

Chief Executive Officer, American Process Inc.



Dr. Theodora Retsina founded American Process in 1995 and has led the company's growth and diversification efforts. Dr. Retsina has more than twenty years of experience in executive management, engineering, process development, and operations. Prior to founding American Process, she was the International Project Manager for Parsons and Whittemore Inc., a global design-build-operator of pulp and paper mills, where she was responsible for project construction and process development and optimization. Dr Retsina is a licensed professional engineer (PE) and the author of more than 30 scientific publications, patents, and patents pending. She received a PhD in Chemical Engineering from Imperial College, University of London.

Randy Cortright

Founder and Chief Technical Officer, Virent



Dr. Randy D. Cortright is the founder and Chief Technology Officer of Virent Inc. He has more than 35 years of experience in the field of catalytic processing of both fossil fuel and biomass-derived feedstocks into chemicals and fuels. Dr. Cortright's background includes research and development, process design, start-up, and operations of large-scale industrial catalytic processes at UOP LLC, a provider of petroleum and petrochemical process technologies. He received B.S. and M.S. degrees in chemical engineering from Michigan Technological University. After leaving UOP, Dr. Cortright earned his Ph.D. in chemical engineering from the University of Wisconsin. While working at the University of Wisconsin, Dr. Cortright co-invented Aqueous Phase Reforming, the innovative pathway to biofuels and bioproducts used by Virent's BioForming® technology platform. In 2009, Dr. Cortright and Virent Energy Systems were recognized as one of the World Economic Forum's Technology Pioneers.

Raymond G. Wissinger

Manager, Renewable Energy & Chemicals Development, UOP, LLC



Raymond (Ray) Wissinger is the Manager of the Renewable Energy and Chemicals Development group at UOP, LLC (a Honeywell Company) in Des Plaines, Illinois. In this role, he is responsible for managing technology development programs as well as supporting the Renewable Energy and Chemicals business unit's strategic planning and technology commercialization efforts. Ray has 28 years of experience in process design, research, and development in the chemical and petroleum industries. Before joining UOP in July 2013, Ray was with Honeywell PMT Resins & Chemicals division, where he was involved in developing process technology for ammonium sulphate nitrate fertilizers and nylon polymers. Ray has a B.S. in chemical engineering from the University of Pittsburgh and a Ph.D. in chemical engineering from the University of Delaware. He is also a certified six sigma black belt and a member of the American Institute of Chemical Engineers.

Santosh Gangwal

Director, Business Development, Southern Research Institute



Dr. Santosh Gangwal, Director of Business Development at Southern Research Institute, graduated from the University of Waterloo, Canada, in 1977 with a PhD in Chemical Engineering. He possesses more than 37 years of experience in various fossil and renewable energy technologies and has managed complex multimillion dollar research programs totaling more than \$40 million for the government and private industry in coal/biomass co-feeding, gasification, pyrolysis and liquefaction, membrane-based gas separation, liquid fuel desulfurization, combined-cycle power systems, compact processors for fuel cells, carbon capture, Fischer-Tropsch (FT) synthesis, higher alcohol synthesis, hydrogen production, low-grade waste heat utilization, waste-to-energy conversion, and energy storage. At Southern Research, he is presently leading projects in solar energy storage using alkaline earth metal composites, associated gas utilization in solid oxide fuel cells, selective FT catalysis for liquid fuels production, clean high-hydrogen/low-methane syngas from low-rank coal-biomass mixtures, and solvent-based mild biomass liquefaction process for refinery-ready bio oils. Prior to joining Southern Research, he pioneered the development of an internationally recognized syngas desulfurization program at RTI International. He has authored 13 patents and more than 200 peer-reviewed publications and conference proceedings.

Andrew Held

Senior Director, Deployment and Engineering, Virent, Inc.



Andrew Held leads the Deployment and Engineering efforts at Virent, Inc.—a biofuels and bioproducts technology company in Madison, Wisconsin. He joined Virent in 2007 and his current role combines early stage deployment and engineering activities to de-risk scale up and deliver material to meet commercial partner needs. He has also played an instrumental role in Virent’s feedstock development efforts through contracts and relationships with multiple industrial, national lab, and university parties under numerous awards and collaborations. Prior to joining Virent, Andrew had ten years of operations and research and development experience at Cargill, an international provider of food, agricultural, and risk management products and services, where he played instrumental roles on technical, engineering, and operations management teams scaling production processes for commercialization. His work has included the manufacture of organic acids and edible polyols by fermentation, lactic acid for polymers, and natural polyols for polyurethanes. Andrew specializes in the integration and deployment of biological and chemical processes.

John D. Trawick

Research Fellow, Genomatica



John D. Trawick joined Genomatica in 2004 and is now a research fellow in strain engineering. He has worked on both computational biology and several laboratory-based projects. Currently, John leads the Genomatica team working on a U.S. Department of Energy-funded Biomass-to-BDO project for an integrated biorefinery. From 1997–2004 John was Senior Research Scientist and Principal Scientist at Elitra Pharmaceuticals, identifying targets for new antimicrobial agents. From 1992–1997 John worked in the Biology Department at San Diego State University where he is still an adjunct assistant professor. Prior to SDSU, John worked at the Hepatobiliary Research Center at the University of Colorado Health Sciences Center as an adjunct assistant professor in the Department of Medicine. John received a B.A in biological sciences from Gustavus Adolphus College, St. Peter, Minnesota in 1976 and a M.S in biological sciences from Northern Illinois University, DeKalb, Illinois, in 1979. In 1984, John received a Ph.D. in microbiology from the University of Minnesota/Mayo Graduate School of Medicine, followed by postdoctoral work at the Mayo Clinic and the University of Colorado. As Executive Director of USIPA, Seth represents the interests of the U.S.-based industrial pellet industry

Jennifer B. Dunn

Biofuel Life Cycle Analysis Team Lead, Argonne National Laboratory



Dr. Jennifer B. Dunn is a principal environmental analyst and lead of the Biofuel Life Cycle Analysis Team at Argonne National Laboratory. She also serves as the BETO-Argonne Laboratory Relationship Manager. She investigates life-cycle energy consumption and environmental impacts of advanced transportation and fuel technologies, including biofuels and battery-powered electric drive vehicles. Prior to joining Argonne, Jennifer led life-cycle analysis projects in the United States for URS Corporation and supported mobile source emission reduction programs at the United States Environmental Protection Agency. She holds a Ph.D. in Chemical Engineering from the University of Michigan.

Ken Williams

Global R&D Lead for Feedstock Innovation, NatureWorks, LLC



As Global R&D Head for Feedstock Innovation at NatureWorks—one of the world's leading biopolymer producers—**Ken Williams** spearheaded major cost and capacity improvements for NatureWorks' Blair, Nebraska, production biorefinery and leads NatureWorks' sustainable feedstock global initiative, including greenhouse gas platforms such as the disruptive joint venture announced with Calysta, Inc.

He brings to bear over a decade of assessing, scaling, and commercializing innovative renewable and biobased technology platforms, from his current position at NatureWorks to his previous work at Cargill's Process Solutions Technology Development Center. Contributions from this work were honored with Presidential Green Chemistry Challenge Award (2008) and Cargill Chairman's Award (2010).

Ken's talk will focus on lessons learned and innovative strategies for deploying sustainable, high-value renewable chemical technologies globally.

Ken received a Bachelor of Science in chemical engineering (with highest honors and cooperative plan) in 2001 from Georgia Tech, and a Ph.D. in chemical engineering in 2006 from the University of Minnesota, where he held an NSF Graduate Research Fellowship from 2001–2004. His thesis on dynamics of high-temperature catalysis was supervised by Lanny D. Schmidt. Ken has published 10 papers in refereed journals.

Brent Shanks

Steffensen Professor, Iowa State University



Dr. Brent Shanks is the Mike and Jean Steffenson Professor of Chemical and Biological Engineering at Iowa State University and Director of the National Science Foundation Engineering Research Center for Biorenewable Chemicals (CBiRC). He received his Bachelor of Science from Iowa State University in 1983 and an M.S. and Ph.D. from the California Institute of Technology in 1985 and 1988, respectively. From 1988–1999 he worked as a research engineer and department manager in the Catalyst Department at the Shell Chemical Company technology center in Houston, Texas. He joined the faculty at Iowa State University in 1999 where his work has primarily involved the research and development of novel heterogeneous catalyst systems for efficiently converting biological-based feedstocks to chemicals and fuels.

John Eichberger

Vice President, Government Relations, National Association of Convenience Stores



John Eichberger is Vice President of Government Relations for the National Association of Convenience Stores (NACS) where he oversees the association's government relations activities; represents the convenience and petroleum retailing industry before Congress, the Administration and the media; and directs the association's petroleum-related activities. Eichberger joined the association in 2000 as Director of Motor Fuels and was named to his current position in 2006.

NACS represents an industry operating more than 151,000 retail locations, of which more than 126,000 sell motor fuels, accounting for 80 percent of the gasoline sold in the country. In 2012, the industry generated \$695.5 billion in sales (one of every \$23 spent in the United States) and employed more than 1.8 million workers.

In 2013, Eichberger was named Executive Director of The Fuels Institute, a non-profit, independent think tank founded and managed by NACS. The Fuels Institute draws together various stakeholders from the vehicle and fuels industries to collaborate and produce fact-based research on the critical issues facing the transportation market.

Eichberger continues to serve in his capacity of Vice President of Government Relations of NACS.

Rob Underwood

Director of Congressional Relations, Petroleum Marketers Association of America



Rob Underwood joined the Petroleum Marketers Association of America (PMAA) in July 2007 as Manager of Congressional Relations to represent jobbers and convenience store owners' legislative interests on Capitol Hill. Prior to joining PMAA, Rob worked for U.S. Senator Saxby Chambliss (R-GA).

Rob assists PMAA Vice President Sherri Stone on all industry priorities pending in the U.S. Congress. Rob regularly attends congressional committee hearings and mark-ups related to oil futures market reform, credit card interchange fees, renewable fuels, and price control legislation. Rob sits on the National Conference on Weights and Measures (NCWM) Laws and Regulations Committee, which holds jurisdiction over automatic temperature compensation (ATC) for retail motor fuels.

Rob is a native of Georgia, where he earned a Bachelor of Arts in political science from the University of Georgia.

Shannon Baker-Branstetter

Policy Counsel, Energy and Environment, Consumers Union



Shannon Baker-Branstetter serves as policy counsel for Consumers Union’s Washington, D.C., Office, where she handles clean energy and climate change policy, toxics regulatory reform, and safe drinking water issues. Ms. Baker-Branstetter earned a B.A. from Yale University, during which time she performed research for Yale Forestry School and Florida Institute of Technology, and a master’s degree in Public Policy from University of California, Los Angeles. Her prior employment includes work at the Government Accountability Office and the U.S. Department of Labor. Ms. Baker-Branstetter is an alumna of Georgetown Law and is a member of the California and District of Columbia Bar Associations

Michael Wang

Senior Scientist and Group Leader, Energy Systems, Argonne National Laboratory



Dr. Michael Wang is the Manager of the Systems Assessment Section of the Energy Systems Division at Argonne National Laboratory. Dr. Wang's group covers research topics including evaluation of energy and environmental impacts of advanced vehicle technologies and new transportation fuels, the assessment of market potentials of new vehicle and fuel technologies, and the projection of transportation development in emerging economies such as China.

Dr. Wang developed Argonne's GREET (Greenhouse gases, Regulated Emissions, and Energy use in Transportation) software model for life-cycle analysis of advanced vehicle technologies and transportation fuels. He continues to lead Argonne's GREET development efforts.

Dr. Wang obtained his Ph.D. and M.S. from University of California at Davis. He obtained his B.S. from China Agricultural University. He has more than 200 publications.

Stephen S. Kelley

Principal and Department Head, Department of Forest Biomaterials,
North Carolina State University



Dr. Steve Kelley has been the Department Head and a professor in the Department of Forest Biomaterials at North Carolina State University (NCSU) since 2005. Prior to this position, he spent 13 years at the U.S. Department of Energy National Renewable Energy Laboratory working on bioenergy technologies and sustainability, and 5 years in industry.

His research interests at NCSU include the sustainable production of energy and materials from biomass, and life-cycle analysis of wood products and energy systems. He has taught classes in sustainable building materials, wood chemistry, and wood composites, and currently co-supervises five Ph.D. students.

Dr. Kelley is a fellow in the International Academy of Wood Science and serves on the National Academy of Sciences, Board on Agriculture and Natural Resources. He currently serves on the editorial boards of three international journals, is the President of CORRIM (a non-profit organization focused on using life-cycle analysis tools to evaluate durable wood products), and a member of the Executive Board of the Institute for Forest Biotechnology.

Reid Miner

Vice President, National Council for Air and Stream Improvement



Reid Miner works for the National Council for Air and Stream Improvement (NCASI), a non-profit environmental research organization focusing on issues important to the North American forest products industry. For the last 20 years, his work has focused primarily on biogenic carbon accounting and life-cycle assessment of forest-derived products and energy. Over this period, he has authored or contributed to publications by the Intergovernmental Panel on Climate Change, the United Nations Food and Agriculture Organization, the World Business Council for Sustainable Development, the International Finance Corporation, the World Research Institute, the Society of American Foresters, and other organizations interested in understanding the life-cycle carbon and greenhouse gas implications of using forest-based products and energy.

David Cleaves

Fuels Technical and Regulatory Affairs Senior Engineer, Mercedes-Benz



Dr. David Cleaves is the Climate Change Advisor of the U.S. Department of Agriculture Forest Service. In this role, he serves the Forest Service Chief, executive leadership, and the field by coordinating activities related to climate change adaptation, mitigation, and communication. Dave is the primary spokesperson for the agency on the role of forests in climate change and leads the implementation of the Forest Service's nationwide strategy for weaving climate change response into policies, processes, and partnerships.

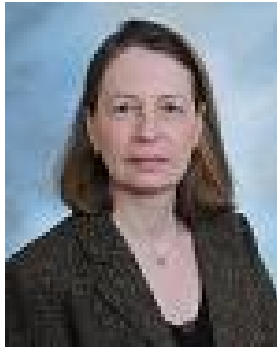
Dave was Director of the Rocky Mountain Research Station overseeing multidisciplinary research and development at 12 laboratories in 14 states in the Interior West. He has also been Staff Director for all national research programs in economics, forest products, social science, recreation and tourism, urban forestry, science education, and the Resources Planning Act (RPA) assessment.

Dave served as a Forest Service research project leader in fire economics and management in Riverside, California, and a professor of forest marketing and economics at Oregon State University.

Dave has a B.S. and M.S. from Michigan State University and a Ph.D. in economics from Texas A&M University.

Lauren Fillmore

Senior Program Director, Water Environment Research Foundation



Lauren Fillmore is a Senior Program Director at the Water Environment Research Foundation (WERF), where she directs research in sustainable wastewater treatment, energy recovery, and climate change programs. Under Lauren's direction, WERF's research includes the state of the science on energy efficiency and recovery from wastewater. To date, Lauren has managed more than five million dollars of research into energy efficiency and recovery in the wastewater sector. In addition, she managed several large research studies into greenhouse gas (methane and nitrous oxide) emissions from wastewater treatment and collection. She is also managing several projects on the impacts of climate change on the wastewater sector and the planning process to adapt to climate change.

Lauren has both Bachelor of Science and Master of Science degrees in environmental science from Rutgers University. Lauren has more than 30 years' experience providing technical and managerial support to Clean Water Act programs and for technology transfer in wastewater treatment, collection systems, biosolids management, stormwater best management practices, and decentralized systems. She is the author of numerous papers and reports and has been the invited speaker on energy optimization in the wastewater sector at many conferences worldwide.

William Eleazer

Supervising Engineer, Brown and Caldwell



William Eleazer, P.E. has been Supervising Engineer and Project Manager for Large Wastewater Treatment Plant Upgrades for Brown and Caldwell for the past 20 years and is currently based in the Brown and Caldwell—Miami office. Brown and Caldwell is a national environmental engineering consulting firm with more than 50 offices throughout the United States. He holds a bachelor's and master's degrees from North Carolina State University in environmental engineering.

James R. Oyler
President, Genifuel Corporation



James R. Oyler is the Founder and President of Genifuel Corporation. Formed in 2006, Genifuel develops and manufactures hydrothermal processing systems to produce biofuels from wet organic materials, especially wet wastes. This focus allows the company to “solve two problems at once” by producing renewable fuels while cleanly disposing of difficult wastes. Outputs may be either bio-crude oil (which can be refined to drop-in transportation fuels), natural gas (which can be used for generation of renewable electricity), or compressed natural gas (for transportation).

Mr. Oyler holds more than a dozen patents issued or pending, as well as exclusive licenses to other patents for hydrothermal processing. Earlier, he held senior positions in energy consulting and corporate management leading to twelve years as CEO of a publicly traded company.

Genifuel is currently commissioning a pilot-scale facility to process algae into biofuels and is also working with a number of other projects throughout the world using a variety of wet feedstocks. Many of these projects are focused on the conversion of wastewater sludge into fuels while cleanly solving existing sludge disposal problems.

Todd Williams

Deputy Leader for Wastewater Infrastructure Practice, CH2M HILL



Todd Williams has a 34-year career in environmental engineering with operating and design experience and specific emphasis in water residuals and biosolids management. Mr. Williams has made numerous presentations and is a contributing author for several articles and books significant to biosolids and residuals management, composting, and odor control, including the recently published WEF/WERF/EPA Solids Process Design and Management Manual. Todd is an engineering graduate of Virginia Tech and is the past Chair of the Water Environment Federation's Residuals and Biosolids Committee. Todd works out of CH2M HILL's Richmond, Virginia, office where he serves as CH2M HILL's Deputy Leader for Wastewater Infrastructure Practice, including Residuals Resource Recovery and Biosolids Management.

José A. Olivares

Bioscience Division Leader, Los Alamos National Laboratory

Executive Director, National Alliance for Advanced Biofuels and Bioproducts



Dr. José Olivares serves as Division Leader for the Bioscience Division at Los Alamos National Laboratory. In this position, he provides strategic, technical, and operational management for all activities within the Division. Major focus areas for the 150 staff within the division include a long-standing effort in biosecurity, biosurveillance, and public health security. New areas of growth include bioenergy and biome science. He served as the Executive Director of the National Alliance for Advanced Biofuels and Bioproducts, a consortium of 40 institutions recently funded by the U.S. Department of Energy's Bioenergy Technologies Office.

He is also a partner of the consulting firm Biologic Energy Partners, LLC, and Editor-in-Chief of the scientific journals *Algal Research* and *New Negatives in Plant Science* (Elsevier Publishers).

He received a Bachelor of Science in chemistry from Wilkes College, and his Ph.D. in analytical chemistry from Iowa State University. His research focus has been primarily in instrumentation for mass spectrometry and biological and chemical sensor development for national security and health-related applications.

John A. McGowen

Director of Operations and Program, Arizona State University, AzCATI and ATP³



John A. McGowen, Ph.D., PMP, is Director of Operations and Program Management for the Algae Testbed Public Private Partnership (ATP³), a \$15M project funded by the U.S. Department of Energy (DOE). As such, he is responsible for the implementation of the executive team processes and leadership of the program management team. He is also responsible for identification and implementation of client projects and best practices in algae growth and processing, standardization of methodologies, the implementation of ATP³'s cultivation trial experimental framework, control of program budgets, milestone tracking, and reporting to DOE. As portfolio manager and a founding member of Arizona State University's Project Management Office, his key responsibilities center on developing, adapting, and integrating project management best practices into an academic translational research and development environment with a focus on large-scale proposal development, teaming, industrial outreach, relationship and collaboration management, and project and program execution.

He acted as proposal manager for large-scale, multi-institutional, multi-million dollar proposal teams, coordinating faculty, administration, and external academic and industrial collaborators on more than \$100M in proposal activity over the last seven years. He has served in key leadership roles on awards with a portfolio value in excess of \$35M. He has eighteen years of project/portfolio management and technology development experience and has been a certified project management professional (PMP®) since 2008.

Kimberly Ogden

Professor, University of Arizona

Engineering Technical Lead, National Alliance for Advanced Biofuels and Bioproducts



Kimberly Ogden is a professor of chemical and environmental engineering at the University of Arizona (UA). She received her Bachelor of Science from the University of Pennsylvania and her M.S. and Ph.D. from the University of Colorado. Prior to joining the UA in the fall of 1992, she was a postdoctoral fellow at Los Alamos National Laboratory. She is currently on the managing board of Society of Biological Engineers (SBE) and recently completed her term as the secretary of American Institute of Chemical Engineers (AIChE). Kim's research focus includes bioreactor design for production of alternative fuels from algae and sweet sorghum and microbiological water quality. She is the engineering technical lead for the National Alliance for Advanced Biofuels and Bioproducts (NAABB). Her research in algae to biofuel continues through a regional algal feedstock testbed program funded by the U.S. Department of Energy. The goal of this project is to obtain long-term outdoor algal cultivation data that will be available to the public for use in modeling and other research efforts and to demonstrate the feasibility of year-round cultivation. Furthermore, industrial and other universities will be able to use the testbeds to validate new technologies, such as novel harvesting and extraction systems.

Martin Sabarsky

Chief Executive Officer, Cellana



Martin Sabarsky has served as CEO of Cellana since 2011. Prior to this, he had been CFO and COO of Cellana since 2008. Prior to joining Cellana, from 2000–2007, he led the corporate development function at Diversa Corporation within the finance and accounting department and took on increasing levels of management responsibility, most recently as Vice President of Corporate Development and as a member of the Executive Committee. Before Diversa, Mr. Sabarsky worked as an investment banker with Bear, Stearns & Co. Inc., where he focused on financings and mergers and acquisitions within the life sciences industry and was a lead banker on Diversa’s \$200 million IPO in 2000. Prior to joining Bear Stearns, he worked as a transactional attorney with Latham & Watkins LLP. Mr. Sabarsky has an A.B. in biology and political science from Brown University, a J.D. from Harvard Law School, and an M.B.A. from the Rady School of Management at the University of California, San Diego. He is currently a member of the Board of Directors of the Algae Biomass Organization (ABO).

Dennis Hall

Director, OBIC Bioproducts Innovation Center



Dennis Hall is Director of the OBIC Bioproducts Innovation Center, located at The Ohio State University in Columbus, Ohio. As Director, Mr. Hall has assisted more than 60 OBIC collaborators in securing \$100+ million in supplemental funding to accelerate research and commercialization activities. Examples of these funded projects include support of industrial partners such as The Andersons, Ashland, Battelle, Scotts, Emery Oleochemicals, PepsiCo, Sherwin Williams, and Quasar Energy Group, supporting job growth and forming a bridge between academia and business. Additionally, Mr. Hall testified to the United States Senate Committee on Agriculture, Nutrition, and Forestry, on “Growing Jobs in Rural America” in July 2011. Mr. Hall is PI or Co-PI to several bioproduct and bioenergy education projects aimed at promoting the commercialization of bioproducts and preparing the talent needed in the emerging bioeconomy. OBIC has forged excellent relations with European leaders in an effort to expedite commercialization efforts on both continents. Outside of OBIC, Denny is a member of the North Union Local Board of Education, advisor to the Ohio State University’s Collegiate Young Farmers organization, and a 6th generation farmer in Ohio.

Gerard Ostheimer

Global Lead for Sustainable Bioenergy, Sustainable Energy for All Initiative,
United Nations and World Bank



Dr. Gerard Ostheimer is the Global Lead for Sustainable Bioenergy under the United Nations and World Bank “Sustainable Energy For All” initiative. In this capacity, he promotes the development and deployment of sustainable bioenergy solutions that contribute to achieving Sustainable Energy For All’s goals of universal energy access and doubling the use of renewable energy by 2030.

Previously, Dr. Ostheimer served as Science Advisor for the Foreign Agriculture Service of the U.S. Department of Agriculture, where he worked at the interface between sustainability, biofuels, international development, and international trade in agricultural products. Dr. Ostheimer was the U.S. government technical lead to the Global Bioenergy Partnership (GBEP) and leads U.S. contributions to the GBEP indicators of sustainable bioenergy production and use.

Dr. Ostheimer earned a Ph.D. in molecular biology at the University of Oregon and did postdoctoral work in the systems biology of cancer at Massachusetts Institute of Technology.

Cora Dickson

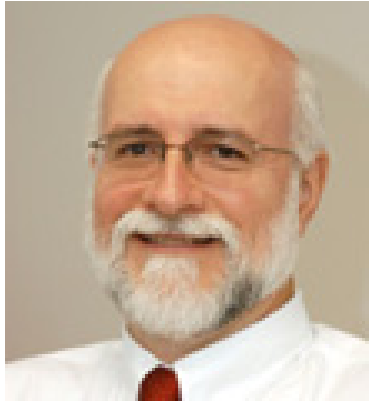
Senior International Trade Specialist, U.S. Department of Commerce



Cora Dickson is a renewable energy sector analyst in the Office of Energy and Environmental Industries at the International Trade administration (ITA) in the U.S. Department of Commerce. She currently covers biofuels, biomass, hydropower, fuel cell power, geothermal power, and waste to energy. Since joining ITA in 2001, Ms. Dickson has worked on several sectors and markets (particularly in the Asia region) to address policy concerns with foreign governments on behalf of U.S. exporters. She earned a master's degree in international communication from The American University in 1999.

Arnaldo Vieira de Carvalho

Lead Energy Specialist, Inter-American Development Bank



Arnaldo Vieira de Carvalho has been working for the Inter-American Development Bank (IDB) since 1997 on financing and implementing sustainable energy projects throughout Latin America and the Caribbean (LAC), especially on energy efficiency, renewable energy, and biofuels. He has been responsible for several emblematic IDB initiatives, such as the IDEAS energy innovation contest, the SE4ALL LAC Hub and the LAC Sustainable Biofuels for Aviation Program. Mr. Vieira de Carvalho was Director of the Latin American Energy Organization (OLADE) in Quito, Ecuador, and General Manager for Power Generation and New Energy Technologies of Promon Engenharia, a leading Brazilian consulting firm in Rio de Janeiro and São Paulo, acting internationally, where he worked for more than 15 years. He has also worked as an independent energy consultant in several Latin American countries for power utilities and international organizations such as The World Bank, the Organization of American States (OAS), and several UN agencies. Mr. Vieira de Carvalho holds a mechanical engineering degree from the Aeronautical Institute of Technology in São José dos Campos, Brazil, and a master's degree in energy from Kansas State University in Manhattan, Kansas.

Artur Milanez

Manager of Biofuels Department, Brazilian Development Bank



Artur Milanez graduated in business administration and holds a master's degree in economics. From 2001–2004, he worked at the Brazilian Innovation Agency (FINEP) as a financial analyst of research and development investment projects. Afterwards, he joined the Brazilian Development Bank (BNDES) staff also as a financial analyst, focusing on industrial project developments. In 2008, he was appointed to be the research manager of the Biofuels Department. He has conducted several studies regarding biofuel industry trends, including technology development, regulatory mandates and public policies, and market perspectives.

Huiyong Zhuang

Research Professor, National Energy Research Center of Liquid Biofuel,
National Bio Energy Co., Ltd.



Huiyong Zhuang is a research professor and agricultural and forestry biomass engineering expert of the national key project of scientific and technical supporting programs approved by the Ministry of Science and Technology. He is a forestry biomass energy expert of the State Forestry Administration and the Deputy Director of Energy Development and Research Center of China Investment Association. Additionally, he is a member of the China Renewable Energy Society, the Deputy Director for the Energy Branch of the China Agricultural Machinery Association, and Director of the S&T Department of National Bio Energy Co., Ltd.

His main research field is modern biomass energy hi-efficiency utilization technology. He has experience in direct-fired biomass power generation technology, energy plants, biomass liquid fuel, biomass pellets, CDM projects related to biomass energy, collection and storage mode of agricultural and forestry biomass feedstock, biomass feedstock treatment technology and equipment, and policies and strategies related to biomass energy industry. He was the earliest participator and implementer of the direct-fired biomass power generation project in China and has chaired and participated in more than 20 S&T projects.

Ashlie B. Delshad

Assistant Professor of Political Science, West Chester University of Pennsylvania



Dr. Ashlie B. Delshad is an assistant professor in the Department of Political Science at West Chester University of Pennsylvania. Dr. Delshad received her Ph.D. in political science from Purdue University in 2011. During her time at Purdue, Dr. Delshad became involved in a National Science Foundation (NSF) research project on politics and public policy in the realm of biofuels. Since that time, her research on biofuels has focused specifically on the use of political rhetoric to influence the policymaking process, as well as public attitudes and media coverage of biofuels. She has presented her research at numerous national conferences and has published her work in peer-reviewed journals, including *Politics and Policy*, *Review of Policy Research*, and *Energy Policy*.

Linda Silverman

Team Lead, Workforce Development and Education, U.S. Department of Energy



Linda Silverman is the lead for workforce and education in the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy. In that role, she focuses on workforce issues related to growing the clean energy economy and enhancing the educational pipeline through multidisciplinary energy education resources, such as the Energy Literacy Framework. Prior to this, she spent 10 years as a Senior Advisor on renewable energy and climate change analytical issues, primarily focusing on international and market issues. From 1993–2001, Linda worked in DOE's Office of Policy on climate change policy issues and served on the U.S. government's delegation to the UN Framework Convention on Climate Change and the Kyoto Protocol. Linda holds a M.A. in international affairs from the Johns Hopkins Nitze School of Advanced International Studies (SAIS) and a B.S. in finance from the University of Colorado.

Jason Miner

Director, Strategic Communications, Glover Park Group



Jason Miner is a managing director and Director of the Strategic Communications Division at The Glover Park Group (GPG). Miner is a leader in GPG's quickly growing Energy and Sustainability Practice and manages a diverse group of accounts for the firm. Miner focuses on large, integrated campaigns that often include public opinion research, advertising, and government relations in addition to messaging and earned media strategies. Miner has developed communications strategies and supporting media tactics for Fortune 100 companies, as well as leading trade associations, industry groups, and non-profits. He is highly experienced in crisis communications, and his expertise includes a broad range of energy and environmental topics, such as policies and politics related to climate change, renewable energy, electricity transmission, energy efficiency, sustainable development, and electricity market structure.

Miner's expertise in understanding and advocating for public policies in a competitive environment is rooted in his experience on national-level electoral politics. Prior to joining The Glover Park Group, Miner was Research Director for the Democratic National Committee (DNC), overseeing the national issues and opposition research effort for the party. Miner has also worked on a number of statewide campaigns, conducting issue and opposition research. Miner attended Vassar College in Poughkeepsie, New York.

Liv Haselbach

Associate Professor, Department of Civil and Environmental Engineering,
Washington State University, Imagine Tomorrow



Dr. Liv Haselbach is the author of the McGraw-Hill GreenSource book, *The Engineering Guide to LEED- New Construction, Sustainable Construction for Engineers* and is the Associate Director of the U.S. Department of Transportation University Transportation Center for Environmentally Sustainable Transportation in Cold Climates (CESTiCC). She has authored numerous papers on sustainability related to site issues, carbon sequestration, and low-impact development. Her recent research includes developing energy literacy rubrics and life-cycle (particularly use-phase) projects and course development. Dr. Haselbach is a licensed professional engineer and a LEED AP (BD+C). Prior to her academic career, she founded an engineering consulting company in the New York–Connecticut area that specialized in permitting, construction, and site development for major U.S. companies, particularly in the retail petroleum and fast food industries. Her degrees include a B.S. in civil and environmental engineering from Cornell, an M.S. in chemical engineering from University of California, Berkeley, and a Ph.D. in environmental engineering from the University of Connecticut.