

KEYNOTE SPEAKERS

William F. Banholzer

Banholzer is an Executive Vice President leading Dow's Venture Capital, New Business Development, and Licensing activities, and is also Dow's Chief Technology Officer. Banholzer chairs the Innovation and New Business Development Committee that oversees investments in new technologies and major business initiatives. In addition, he is a member of the Board of Directors for the Dow Corning Corporation, serving on the Corporate Responsibility Committee. Banholzer also serves on the Dow Kokam Board of Directors, Dow AgroScience's Members Committee and the Dow Foundation Board of Directors.

Banholzer manages a portfolio of research programs with an annual budget of \$1.7B. He sets the vision for science and technology at Dow and leads the execution of that vision. Under his leadership the value of Dow's innovation pipeline has tripled from \$10B to over \$32B. Banholzer's efforts to accelerate Dow's technology development were recognized by *R&D Magazine*, where Dow was ranked in the top ten for R&D in all industries, and a recent Booz Allen study ranked Dow's innovation portfolio management as "Best in Class." Banholzer also received the Industrial Research Institute's Holland Award for R&D management and the Council of Chemical Research's Pruitt Award for his innovative approach to research collaborations.

Banholzer has a strong history of technical excellence and innovation, spanning his more than 25 years of industrial experience. He was elected to the U.S. National Academy of Engineering in 2002, a reflection of the significance of his technical contributions. He has been an active NAE member, one of only 175 members of the Chemical Engineering section. In 2006 he was elected by the Academy membership to serve a three-year term as one of 12 councillors comprising the governing body of the NAE. Banholzer currently serves on the Board on Energy and Environmental Sciences. He also serves on the advisory board for chemistry and chemical engineering at UC Berkeley, the Chemical Engineering Advisory Board at University of Wisconsin, the American Chemical Society President's Commission on Chemical Education, and the MIT Visiting Committee on Chemistry and Chemical Engineering. He is a member of the American Chemical Society and the American Institute of Chemical Engineers.

Banholzer had a 22-year career with General Electric Company (GE) prior to joining Dow. He left GE as vice president of Global Technology at GE Advanced Materials, where he was responsible for worldwide technology and engineering. He joined GE in 1983 as a staff chemical engineer in the company's Corporate Research and Development Laboratory where he held several leadership positions prior to joining the Superabrasive business. Banholzer was elected a company officer and moved to GE Lighting as vice president of Global Engineering in 1997. He transferred to GE's Advanced Materials business as the vice president of global technology in 1999. During his GE career, Banholzer was honored with GE's Bronze, Silver, and Gold Patent Awards; GE Superabrasives' Leadership Award; GE Plastics' CEO Six Sigma Award; and election to the Whitney Gallery of Technical Achievers.

Banholzer earned a bachelor's degree in chemistry from Marquette University and master's and doctorate degrees in chemical engineering from the University of Illinois. He is a certified Six Sigma Master Black Belt, holds 16 U.S. patents and has over 80 publications, which have received 2,300 citations with an H index of 27 for his work in engineering and chemistry.

Gregory B. Jaczko

The Honorable Gregory B. Jaczko served as Chairman of the U.S. Nuclear Regulatory Commission from May 13, 2009 until July 9, 2012. He was first sworn in as a Commissioner on Jan. 21, 2005.

Throughout his tenure on the Commission, Dr. Jaczko focused on the NRC being a decisive safety regulator with the confidence of the public. He worked to have the agency clearly communicate with the public and its licensees. Dr. Jaczko focused on the safety of existing nuclear reactors and radioactive materials, implementing a predictable safety review process for license applications, ensuring the agency conducts thorough environmental reviews, and promoting strong enforcement and accountability.

Dr. Jaczko led agency efforts to respond to the Fukushima Daichii nuclear power plant accident. He championed initiatives to strengthen the safety and security of nuclear power plants and radioactive materials. He promoted efforts to modernize emergency preparedness programs and to develop a Commission policy on the importance of a healthy “safety culture” at the NRC and its licensees. Dr. Jaczko also worked to shape agency budgets to ensure staff has the tools and guidance documents they need to do their jobs.

Dr. Jaczko’s professional career has been devoted to science, and its use and impact in the public policy arena. Immediately prior to assuming the post of Commissioner, Dr. Jaczko served as appropriations director for U.S. Sen. Harry Reid and also served as the Senator’s science policy advisor. He began his Washington, D.C. career as a congressional science fellow in the office of U.S. Rep. Edward Markey. In addition, he has been an adjunct professor at Georgetown University teaching science and policy.

Born in Pennsylvania and raised in upstate New York, Dr. Jaczko earned a bachelor’s degree in physics and philosophy from Cornell University, and a doctorate in physics from the University of Wisconsin-Madison.

Jeffrey E. Thompson

Jeffrey E. Thompson, MD, is chief executive officer and chairman of the boards of Gundersen Lutheran Health System, and a practicing pediatric intensivist and neonatologist. He is a founding member and past board chair of the Wisconsin Collaborative for Healthcare Quality. Presently, he is chairman of the board of the La Crosse Medical Health Science Consortium.

Since completing his professional training in 1984, Dr. Thompson has worked full time solely at Gundersen Clinic and Lutheran Hospital – La Crosse (now Gundersen Lutheran). From 1992 to 1996, he served on the former Board of Directors of Gundersen Clinic and played a key role in the negotiations and governance design that led up to the merger between Gundersen Clinic and Lutheran Health System. Since 1996, Dr. Thompson has been a member of the Board of Governors, and a member of the Board of Trustees. He served as executive vice president from 1995 to 2001. From 2001 to present he has served as chief executive officer.

Dr. Thompson is board certified in Pediatric Critical Care, Neonatal and Perinatal Medicine, and Pediatrics. He finished his Neonatal fellowship at Upstate Medical Center in Syracuse, N.Y., in 1984. He was a Pediatric resident, and then Chief resident from 1979 to 1982 at the same institution. He completed his Pediatric internship at the University of California-Davis from 1978 to 1979. Dr. Thompson graduated in 1978 from the University of Wisconsin-Madison Medical School. He is a member of the American Academy of Pediatrics as well as their subsections in Neonatal and Critical Care Medicine and is a member of American College of Physician Executives. Dr. Thompson has authored a number of articles, book chapters and abstracts on many healthcare topics.

SPEAKER BIOGRAPHIES

Craig H. Benson

Dr. Craig H. Benson is an international expert in environmental engineering and science, a Distinguished Professor of Engineering, and a member of the U.S. National Academy of Engineering. Dr. Benson serves as Director of Sustainability Research and Education and Co-Director of the Office of Sustainability at UW-Madison. He is also Chair of the Departments of Civil and Environmental Engineering and Geological Engineering. Dr. Benson has a B.S. from Lehigh University and M.S.E. and PhD degrees from the University of Texas at Austin, all in Civil Engineering with an emphasis in geotechnical, geoenvironmental, and geological engineering.

Dr. Benson has been conducting experimental and analytical research related to protection of the environment for nearly three decades, with a primary focus on sustainable infrastructure; beneficial use of industrial byproducts; and environmental containment of solid, hazardous, radioactive, and mining wastes. His research includes laboratory studies, large-scale field experiments and computer modeling. His recent research has focused on incorporating recycled materials and industrial byproducts into infrastructure to enhance sustainability through reductions in energy consumption, greenhouse gas emissions, and natural resource consumption. He emphasizes using quantitative metrics to assess sustainability using tools such as life cycle analysis (LCA). In the Office of Sustainability, Dr. Benson is responsible for coordinating all sustainability related education on the UW-Madison campus and for facilitating the interdisciplinary sustainability research enterprise across the UW-Madison campus.

Dr. Benson has received several awards for his work, including the Ralph Peck Award, the Huber Research Prize, the Alfred Noble Prize, and the Croes (twice), Middlebrooks, Collingwood, and Casagrande Awards from the American Society of Civil Engineers and the Award of Merit and the Best Practical Paper Award from ASTM International. Dr. Benson is a former Editor-in-Chief of the Journal of Geotechnical and Geoenvironmental Engineering. He currently serves as Vice President and President Elect of the ASCE Geo-Institute (GI) Board of Governors and is Vice Chair of the Executive Committee of ASTM Committee D18 on Soil and Rock. Dr. Benson is a member of the Academy of Distinguished Alumni at the University of Texas at Austin.

Theodore Bohn

Theodore Bohn is with the Center for Transportation Research at Argonne National Laboratory. He is the principal investigator on Plug-in Hybrid Electric Vehicle (PHEV) prototype vehicle development in the Vehicle Systems Group. The main focus of this effort has evolved into identifying and validating interoperability issues related to PEV charging systems, which include in-vehicle traction battery subsystem benchmarking and validation. Recent research includes Smart Charging and standards related to adaptive charging controls tying the vehicle charging requests to power flow from the grid under various grid marketing and stability conditions. His group at ANL is leading wireless charging standards interoperability and safety research as part of SAE charging standards.

Mr. Bohn has worked for each of the U.S. based automobile manufacturers as well as various Tier I automotive suppliers. He has been working on advanced technology and alternative energy fueled vehicle research for over 25 years. He is the current Advanced Battery Technology Chair for SAE Congress. He actively serves on battery and PHEV related SAE technical standards committees. He is the chair of the SAE Electric Machine Rating Standards task force.

Mr. Bohn received his B.S. and M.S. degrees in electrical engineering at UW-Madison. His area of specialization is design of electric machines, power electronics and dynamic control systems. He has held an adjunct faculty position at UW-Madison where he developed and delivered course materials for a renewable energy based program aimed at electrical/mechanical engineering undergraduates.

Ben Brancel

Ben Brancel was appointed Secretary of the Department of Agriculture, Trade and Consumer Protection (DATCP) by Governor Scott Walker in January. Brancel previously served as the DATCP Secretary under Governor Tommy G. Thompson from 1997-2001.

Brancel is the sixth generation to be raised on his family's farm in Marquette County. Brancel attended the University of Wisconsin-Platteville, where he received a degree in animal science. After managing his dairy operation for 22 years, Brancel now raises registered Angus and Hereford beef cattle.

Brancel served in the Wisconsin Assembly for 11 years. He was tapped to serve as co-chair of the budget-writing Joint Finance Committee in 1995 and was elected by his colleagues to serve as Assembly Speaker in 1997. Brancel was appointed Wisconsin state director of the U.S. Department of Agriculture Farm Services Agency in 2001. He most recently served as the state relations liaison for UW-Madison's College of Agricultural and Life Sciences, where he helped support the Wisconsin Agricultural Research Stations.

As Secretary for the Department of Agriculture, Trade and Consumer Protection, Brancel is interested in the opportunity for bioenergy production to help diversify Wisconsin's changing agricultural landscape and provide additional income streams for farmers and agribusiness while helping increase the state's ability to generate homegrown power, heat and fuel.

Phil Brumm

Throughout his career, Phil has had an interest in the relationship between structure and function in living systems, particularly in the areas of proteins. His graduate work studied the enzymology of vitamin B12 biosynthesis. In industry, he continued to pursue this interest by studying the relationships of starch-degrading enzymes with their substrates. Eventually, he became head of research for an industrial enzyme company with \$50M in sales, Enzyme Bio-Systems, Ltd., which is now a part of Dow-Danisco.

As the Chief Scientific Officer for C5-6 Technologies, Inc., he has responsibility for research focused on the identification, cloning, and characterization of novel microbial carbohydrases through both random shotgun screening of organisms and whole genome mining of organisms. These enzymes are being commercialized for applications in research, biofuels production, and biomedical applications. C5-6 has partnered with commercial and academic laboratories to advance the understanding of the structure and function of these newly discovered enzymes and develop additional commercial applications for them.

Phil is also a principal investigator and leadership team member for the Great Lakes Bioenergy Research Center.

Alan Carroll

Alan Carroll is Professor of Geoscience at UW-Madison, conducting research on sedimentary basin evolution, ancient lake systems, lacustrine

carbonate oil reservoirs, and oil shale. He is also cofounder of Geofuels LLC, a geoscience consulting company specializing in technical issues related to petroleum exploration and development. Formerly he was employed as a Senior Research Specialist at Exxon Production Research Company, and an Exploration Geologist at Sohio Petroleum Company. He holds a B.A. from Carleton College, M.S. from the University of Michigan, Ann Arbor, and a Ph.D. from Stanford University.

Joel Charles

Joel is a UW-Madison student on track toward receiving a dual degree in medicine and public health. After graduation he intends to split his time between family practice and public health advocacy, focusing specifically on policies to mitigate climate change and the health implications of our energy systems. Last year he helped form Focus UW, a student group collaborating with UW institutions and community partners to incentivize sustainable student behavior. In addition to his final two years of medical training he is currently focusing on organizing health care providers around advocacy efforts to help pass national climate legislation, specifically by working with local chapters of Citizens Climate Lobby, 350.org, and Physicians for Social Responsibility.

David Crass

David Crass is chair of Michael Best & Friedrich's Agribusiness, Food Processing and Distribution Group, a leader in the firm's Energy and Sustainability practice and a member of the firm's Management Committee. Mr. Crass has served as the Managing Partner of the firm's Madison Office (2005-2008) and as chair of the firm's Land and Resources Practice Group (2003-2005). He focuses his practice primarily in the areas of environmental and energy law, climate change counseling, agricultural and food industries and renewable energy project development.

Mr. Crass has represented clients in a number of multi-party environmental remediation sites including state and federal-lead hazardous waste sites, manufactured gas plant waste sites, impacted sediment cleanups, emergency spill response and removal actions. Mr. Crass has litigation experience in administrative contested case hearings, civil toxic tort defense, contribution actions, government enforcement defense, professional engineering malpractice and environmental insurance coverage litigation. On the transactional side, Mr. Crass has assisted both buyers and sellers in assessing environmental issues in real estate and corporate

transactions, Brownfield redevelopments and insurance backed liability transfers, and has also counseled lenders on various environmental issues. Mr. Crass has secured and negotiated federal, state and local permits and approvals for a number of projects, including industrial facilities, renewable energy plants and livestock operations.

Charles Crave

Charles Crave is a partner in Crave Brothers Farm and Crave Brothers Farmstead Cheese. He is responsible for the participation with Clear Horizons in the operation of the complete mix digester system located on the farm. The system has allowed the farm to not only handle its waste, but also to produce electricity for itself, the cheese factory and 300 homes every day of the year. Charles has been a partner for 34 years.

Christopher DeMarco

Christopher DeMarco is a twenty-seven-year member of the faculty of Electrical and Computer Engineering (ECE) at UW-Madison, where he holds the Grainger Professorship in Power Engineering. He has served as ECE Department Chair (2002-2005), and is UW-Madison Site Director for the National Science Foundation IUCRC Power Systems Engineering Research Center (2004-present). He was recipient of the UW-Madison Chancellor's Distinguished Teaching Award in 2000. Dr. DeMarco received his Ph.D. from the University of California, Berkeley in 1985, and his B.S. from the Massachusetts Institute of Technology in 1980, both in Electrical Engineering and Computer Sciences. His research and teaching interests center on dynamics, control and optimization of electrical energy systems.

Allen Dines

Mr. Dines is Assistant Director, New Ventures of the UW-Madison Office of Corporate Relations (OCR) and Venture Designer, Discovery v-Lab in the Wisconsin Institute for Discovery. The Office of Corporate Relations assists businesses and entrepreneurs in accessing the diverse resources of UW-Madison. He works principally with new ventures and early stage investors, and manages the Discovery v-Lab, a pre-accelerator operating to foster creation and growth of new ventures at UW-Madison and in the greater Madison community. Mr. Dines joined UW-Madison in 2001 with more than 25 years of experience in industry and technology businesses. In his initial position at the university he served as Assistant Director for Business Development within the Graduate School

where his major focus was commercialization of university technology through startup business development. In 2002, Mr. Dines co-founded the Midwest Research University Network (MRUN), an alliance of those who create and fund startup companies associated with Midwest research institutions. He currently serves as president of MRUN. From 2007-2012 he was Program Manager for the Wiscontrepreneur program focused on expanding the campus-wide access to entrepreneurship. The program was funded in part by the Ewing Marion Kauffman Foundation. He is co-director of the Brinks Innovation Competition which focuses on promoting visibility of high potential cleantech companies in association with the Midwest Cleantech Conference. Mr. Dines serves on advisory boards of the Global Midwest Alliance, MERLIN Mentors and several student entrepreneurship-focused organizations including the UW Student Business Incubator.

Mr. Dines has been involved in three startup ventures, all in the biotechnology sector, two of which he co-founded. All three companies were acquired by leaders in their respective markets. Prior to these ventures, Mr. Dines was an Associate and Staff Manager with Booz, Allen & Hamilton, Inc. in Bethesda, MD.

Mr. Dines holds degrees from the University of Michigan including a B.S in Psychology, a Master of Business Administration, and a Master of Regional Planning in Natural Resources. In 2004, Mr. Dines was named a Wisconsin Idea Fellow by the UW-System President.

Lori DiPrete Brown

Lori DiPrete Brown, UW GHI Associate Director for Education and Engagement, has played a leadership role in developing and sustaining global health programs since she joined the UW School of Medicine and Public Health in 2003. She teaches courses in global public health, quality improvement in low-income countries, and the health and human rights of children. She serves as a mentor and advisor for graduate independent global public health field study, and leads global health field courses in Mexico and Ecuador. DiPrete Brown received a BA from Yale (1983), served in the US Peace Corps in Honduras (1983-1985), and then pursued public health graduate study at Harvard (MSPH, 1988). From 1988 to 2003 DiPrete Brown worked in health and development programs in over 13 countries, collaborating with international organizations such as USAID, WHO, the Pan American Health Organization, Save the Children, CARE, and the Aga Khan Foundation.

DiPrete Brown defines global health broadly, taking into account root determinants of suffering and well-being such as access to food, water, health care, education, a peaceful existence, realization of political, civil and cultural rights, and the opportunity to live in a sustainable and harmonious relationship to the natural environment.

Flora Flygt

Flora Flygt is Strategic Planning and Policy Advisor at American Transmission Co. She has been in the electric utility business for thirty years in a variety of leadership and planning positions, including transmission planning, business development, strategic planning, market and competitive analysis, environmental planning, integrated resource planning, demand-side planning and long-term load forecasting. Flora led the development of ATC's transmission projects that have been approved as part of MISO's initial Multi-Value Project portfolio as well as the first economic transmission project approved by MISO. She has been very active in the Eastern Interconnection Planning Collaborative, chairing the Scenario Planning Working Group. She has been an expert witness on transmission planning, demand-side planning, and integrated resource planning. Prior to joining ATC, Flora was with Alliant Energy Company, Madison Gas & Electric Company and worked as a consultant. She holds an M.S. in Land Resources with a certificate in Energy Analysis & Policy from UW-Madison and a B.A. in Economics from the University of Michigan, Ann Arbor.

Rodney Heller

Rodney Heller is a nationally recognized leader in the field of energy efficient lighting. His expertise lies in upgrading lighting in commercial and institutional buildings. His breadth of experience ranges from heavy industrial factories to surgical suites in hospitals. Simply put, Heller has a passion for energy efficient lighting and getting it right.

Heller is Lighting Certified (LC) by the National Council on Qualifications for the Lighting Professions. He is sustaining member of the Illuminating Engineering Society (IES), has served as President of the Madison Section (2009-2011), and is chair of the Guidelines for Upgrading Lighting Systems in Commercial and Institutional Spaces manual for the society. He is a frequent lecturer on energy efficient lighting upgrades, light and human health, and the fundamentals of lighting.

In 2003, Heller founded Energy Performance

Lighting (EPL) in Cottage Grove, Wisconsin. He has since built the company from a two-person design build firm into a thriving company with 14 employees. As Managing Partner at EPL, Heller is an energy efficient lighting consultant to numerous energy engineering companies and electrical contracting companies nationwide, providing strategic direction, education and research.

A Certified Toastmaster, Heller is an accomplished public speaker, presenting his knowledge about energy efficient lighting to large, enthusiastic groups. Always, his passion for the subject matter comes through. Rodney's audiences quickly come to appreciate his intense study of energy efficient lighting upgrades and how lighting affects the people underneath the light. For example, Heller works with researchers from Harvard School of Medicine, Harvard School of Design, Lawrence Livermore Laboratory and the DOE on reducing energy while improving human health. Heller's clients understand he is not satisfied unless he can achieve a minimum of 60 percent energy savings on every lighting upgrade project. His projects already exceed ASHRAE 90.1, 2010 standards, the most stringent in the country.

Jordan Hemaidan

Jordan Hemaidan is the leader of the Energy and Sustainability Industry Group at Michael Best & Friedrich, and partner who practices extensively in energy law. Mr. Hemaidan has provided representation in siting and certification cases for large power generation facilities, electric transmission lines, natural gas distribution projects, and private energy facilities. Mr. Hemaidan is also active in the renewable energy space, providing representation transactional and regulatory aspects of wind energy development and more recently on carbon trading issues. He is admitted to practice in Wisconsin and in the United States District Court for the Western District of Wisconsin.

Tracey Holloway

Tracey Holloway is an Associate Professor in the Nelson Institute for Environmental Studies at UW-Madison, where she leads an air quality research program. Holloway's research employs computer models and satellite data to understand links between regional air quality, energy, and climate. Holloway earned her Ph.D. in AOS from Princeton University in 2001 and completed a certificate in Science, Technology, and Environmental Policy from the Woodrow Wilson School of Public and International Affairs. Her undergraduate degree

(Sc.B.) is from Brown University in Applied Mathematics, and her post-doctoral work was done at Columbia University's Earth Institute. Professor Holloway is a 2011 Leopold Fellow and a member of the NASA Air Quality Applied Sciences Team. In 2012, Holloway was honored as the first ever recipient of the MIT C3E (Clean Energy Education & Empowerment Awards) award in Education and Mentoring, and the Council on Undergraduate Research in the Geosciences (GeoCUR) Undergraduate Research Mentor Award.

George W. Huber

George W. Huber is a Professor of Chemical Engineering at UW-Madison. George's research focus is on developing new processes for the production of renewable liquid fuels and chemicals. He is co-founder of Anellotech, a biochemical company focused on commercializing, catalytic fast pyrolysis, a technology developed in his research group. George has twice testified at congressional briefings on the importance of catalysis and chemical engineering in solving our nation's energy challenges. He is one of the most highly cited young scholars in the chemical sciences, being cited over 1100 times in 2011. George has authored over 78 peer-reviewed publications including three publications in *Science*. He has received several awards including the NSF CAREER award, the Dreyfus Teacher-Scholar award and the outstanding young faculty award (2010) by the college of engineering at UMass-Amherst.

George serves on the editorial board of *Energy and Environmental Science*, *ChemCatChem*, and *The Catalyst Review*. In June 2007, he chaired a NSF and DOE funded workshop entitled: *Breaking the Chemical and Engineering Barriers to Lignocellulosic Biofuels* (www.ecs.umass.edu/biofuels).

George did a post-doctoral stay with Avelino Corma at the Technical Chemical Institute at the Polytechnical University of Valencia, Spain (UPV-CSIC) where he studied bio-fuels production using petroleum refining technologies. He obtained his Ph.D. in Chemical Engineering from UW-Madison (2005). He obtained his B.S. (1999) and M.S. (2000) degrees from Brigham Young University.

Pete Kling

At UW-Extension, Kling's program priorities include resilient communities, renewable energy, and comprehensive land-use planning and local government. His areas of expertise include comprehensive land use planning, strategic

planning and organizational development, and renewable energy.

Prior to joining UW-Extension, he was interim director of the St. Croix County Planning and Zoning Department, where he administered five program areas including Planning, Recycling, Code Administration, Land Information and Real Property Description.

He received a B.S. in Forestry and Soil Science, and a M.S. in Soil Science from UW-Madison.

Craig Kohn

Craig Kohn is a department chair and high school science teacher at Waterford Union High School. Mr. Kohn has teaching licenses in biology, agricultural science, and environmental science. He is a graduate of UW-Madison where he received degrees in agricultural science, biology, and education. Mr. Kohn was part of the first ever Bioenergy Institute for Teachers program at the Great Lakes Bioenergy Research Center, and also was a Research Experience Teacher in Dr. Cameron Currie's lab where he helped develop tests for enzymatic activity for bioprospecting purposes. Mr. Kohn has developed curriculum for 13 different high school courses, including one the state's first courses on bioenergy. His students engineer and sell lab equipment that he developed while working at UW-Madison and he regularly conducts workshops around the state for teachers in order to help them implement more inquiry-based practices and bioenergy topics into their teaching.

Mr. Kohn was named Agriscience Teacher of the Year in 2011 and was honored as a Kohl Fellowship Teacher this year. He is also a former UW Medical Scholar, Hilldale Fellowship Researcher, Wisconsin Idea Foundation Fellow, and winner of a 2009 National Science Teachers Association Toyota Tapestry Award.

Kathy Kuntz

Kathy joined Cool Choices—a Wisconsin nonprofit that helps individuals, communities and small businesses adopt sustainable practices that reduce their greenhouse gas emissions—in 2010. With almost two decades of experience promoting clean energy solutions, Kathy previously led Focus on Energy, Wisconsin's energy efficiency and renewable energy program. Preferring people to widgets, Kathy is delighted to be part of a team that's making sustainable behaviors fun, social and easy. Kathy is the author of numerous

presentations and papers and has a bachelor's degree from the University of Minnesota, Morris and a master's degree from UW-Madison.

Robert Lasseter

Robert H. Lasseter received his Ph.D. in Physics from the University of Pennsylvania, Philadelphia in 1971. He was a Consulting Engineer at General Electric Co. until he joined UW-Madison in 1980. His research interests focus on the application of power electronics to utility systems. This work includes microgrids, FACTS controllers, use of power electronics in distribution systems and harmonic interactions in power electronic circuits. Professor Lasseter is the technical lead of the CERTS Microgrid Project, a Life Fellow of IEEE, past chair of IEEE Working Group on Distributed Resources and IEEE distinguished lecturer in distributed resources.

Jeannette LeZaks

Jeannette believes that the solutions to our energy challenges necessitate a multi-faceted approach. Her experience reflects that belief, as she brings to the Energy Center of Wisconsin a comprehensive background in energy systems analysis including energy efficiency and renewable energy, greenhouse gas accounting, lifecycle cost analysis and energy policy. At the Energy Center, Jeannette applies this skill-set to research, evaluate and analyze energy efficiency and renewable energy programs.

Jeannette has a bachelor's degree in Natural Resources from Cornell University and a master's degree focusing on Energy Analysis and Policy from the Nelson Institute of Environmental Studies at UW-Madison. She also serves as a volunteer member on the City of Madison's Sustainable Energy and Design Committee as well as a technical advisor for the Energy Task Group of STARS, the Sustainability Tracking Assessment and Rating System for higher education.

Nancy Mathews

Nancy is currently a professor of environmental studies in the Nelson Institute for Environmental Studies at UW-Madison, and director of the Morgridge Center for Public Service. She received her BS in biology from Penn State in 1980, M.S. in wildlife management in 1982, and Ph.D. in Ecology from the State University of New York-Syracuse. Nancy has worked in the both the private and public sectors prior to coming to UW-Madison in 1995. She was an endangered species biologist for

EG&G in Bakersfield California from 1982-1985, and was the assistant unit leader for wildlife at the US Fish and Wildlife Service's Texas Cooperative Fish and Wildlife Research Unit from 1990-1995. Nancy chaired the graduate program in Conservation Biology and Sustainable Development at the Nelson Institute from 2009-2010 and currently serves on the Board of Directors for the International Crane Foundation. Her research and teaching have focused on both wildlife management and conservation biology.

Aleia McCord

Aleia McCord is the co-founder and CEO of W2E Uganda Ltd, a waste to energy company based in Kampala, Uganda that transforms organic waste into renewable electricity and fertilizer. Aleia is a Ph.D. student in the Nelson Institute of Environmental Studies at UW-Madison where she studies microbial ecology at the human-livestock-wildlife interface in Uganda.

Paul Meier

Paul Meier is a scientist with the Wisconsin Energy Institute and has worked with industry, government and public interest groups since 1995. He works extensively with modeling software to better understand energy and environmental issues. Paul has led research efforts to evaluate regional and national strategies spanning electricity, transportation, and building energy sectors. Paul is a civil engineer and earned his Ph.D. from the Nelson Institute for Environmental Studies at UW - Madison.

Phil Montgomery

Phil Montgomery worked extensively on energy and telecommunications issues while serving six terms as a state representative from Green Bay, Wisconsin from 1998 until 2010. As a legislator, Montgomery served on the Joint Finance Committee, the Committee on Information Policy and Technology, and chaired the Assembly Committee on Energy and Utilities. He also served on the Board of Directors of the Wisconsin Public Utility Institute.

Montgomery was appointed Chairperson of the Public Service Commission of Wisconsin in March of 2011 by Governor Scott Walker. He has a Bachelor of Science from the University of Houston and is a former systems engineer.

John Nelson

John Nelson (UW-Madison '76 MS/ME), former chief executive officer at Madison-based Affiliated Engineers, is an adjunct professor in the UW-Madison Department of Civil and Environmental Engineering and a consultant to the design and construction industry. He specializes in lean building practices and strategies and applications for sustainable development. He is chair of the board of visitors for the Nelson Institute for Environmental Studies. He was named to the UW Foundation board in 2010.

Gregory Nemet

Gregory Nemet is an assistant professor at UW-Madison in the La Follette School of Public Affairs and the Nelson Institute's Center for Sustainability and the Global Environment. He is also a member of the university's Energy Sources and Policy Cluster. His research and teaching focus on improving analysis of the global energy system and, more generally, on understanding how to expand access to energy services while reducing environmental impacts. He teaches courses in energy systems analysis, governance of global energy problems, and international environmental policy.

Professor Nemet's research analyzes the process of technological change in energy and its interactions with public policy. These projects fall in two areas: (1) empirical analysis identifying the influences on past technological change and (2) modeling of the effects of policy instruments on future technological outcomes. The first includes assessment of public policy, R&D, learning by doing, and knowledge spillovers. An example of the second is work informing allocation between R&D and demand-side policy instruments to address climate change.

He has been an author in Intergovernmental Panel on Climate Change and the Global Energy Assessment. He received his doctorate in energy and resources from the University of California, Berkeley. His B.A. is in geography and economics from Dartmouth College.

Douglas Reindl

Douglas Reindl is a professor in the Departments of Engineering Professional Development and Mechanical Engineering at UW-Madison. In addition, he directs the UW's Industrial Refrigeration Consortium and HVAC&R Center and is an active faculty member in the UW's Solar

Energy Laboratory. He has extensive expertise in energy systems for buildings and process applications. He is an ASHRAE Fellow and a registered Professional Engineer.

Rolf Reitz

Dr. Reitz is Wisconsin Distinguished Professor of Mechanical Engineering at UW-Madison. He received his Ph.D. in Mechanical and Aerospace Engineering from Princeton University in 1978. Before joining UW-Madison in 1989, Reitz spent six years at the General Motors Research Laboratories, three years as a research staff member at Princeton University, and two years as a research scientist at the Courant Institute of Mathematical Sciences, New York University. His research includes the development of advanced fuel injection and combustion strategies, as well as computer modeling methodologies for internal combustion engines. He is currently director of the Engine Research Center and director of the ERC's Direct-injection Engine Research Consortium that was founded in 2004 to help the industry to meet federal emissions mandates. The Consortium currently includes over 30 automotive OEMs and supplier industries.

Professor Reitz is consultant to many industries, has lectured widely and has won major research awards, including the Department of Energy (DOE) 2012 Vehicle Technologies R&D Award, the Society of Automotive Engineers (SAE) Horning and Colwell awards, the American Society of Mechanical Engineers (ASME) Soichiro Honda Medal and Internal Combustion Engine award, and the UW-Madison College of Engineering Byron Bird award. He has served on the executive board and as Chairman of the International Institute of Liquid Atomization and Spraying Systems (ILASS-Americas). In 1999 he co-founded the International Journal of Engine Research (IJER), which is published by the Institution of Mechanical Engineers in cooperation with SAE and JSAE, and he currently serves as Editor, American continent. He is also on the Editorial Board of several journals, including Atomization and Sprays, and FUEL. Professor Reitz has more than 400 publications and five patents.

Dietram Scheufele

Dietram A. Scheufele holds the John E. Ross Chair in Science Communication at UW-Madison, and is Co-Principal Investigator of the Center for Nanotechnology in Society at Arizona State University. He has published extensively on public attitudes toward science and technology.

Scheufele currently co-chairs the National Conference of Lawyers and Scientists, a joint committee of the American Association for the Advancement of Science and the American Bar Association, and is a former member of the Nanotechnology Technical Advisory Group to the U.S. President's Council of Advisors on Science and Technology.

Scheufele has been a tenured faculty member at Cornell University, a Shorenstein fellow at Harvard University, and - most recently - a DAAD Visiting Professor at the Technische Universität Dresden.

Christopher P. Shoenherr

In September 2011 Chris was appointed to serve as Deputy Secretary of the Department of Administration after serving as Executive Assistant to Department of Administration Secretary Mike Huebsch since July 6th. In his current role Chris serves as the Secretary's chief aide in overseeing Department operations.

Chris joined State government in January 2011 as Administrator for the Division of Energy Services with a primary charge to help develop a state energy policy. In addition, the Division is charged with administering the State's low-income programs related to energy bill assistance and weatherization. Over \$250 million is distributed annually through the Division's activities to support the State's most vulnerable citizens. In July, the State Energy Office was merged into the Division.

Prior to his appointment, Chris was employed by Alliant Energy in Madison. He joined Alliant Energy in June of 2000 as Manager of External Communications. In this role, he was responsible for directing Alliant Energy's external and strategic communications activities.

In June of 2004, Chris stepped into the newly created position of Senior Manager of Federal Regulatory Affairs. As Senior Manager, Chris focused on federal issues under the jurisdiction of the Federal Energy Regulatory Commission (FERC), the development of regional and national wholesale energy markets, and implementation of the Energy Policy Act of 2005.

In September 2006, Chris moved to Washington D.C to head Alliant Energy's federal office and assume responsibility for the company's federal legislative relationships.

Chris returned to Wisconsin in June of 2008 as Director of Sales and Strategic Accounts. In this

capacity, he led a 40-member team charged with relationship management for Alliant Energy's largest customers.

Prior to joining Alliant, Chris spent the first 20 years of his career at We Energies in Milwaukee. Chris was involved in a variety of areas including investor relations, system and project development, government relations, communications, infrastructure siting, and strategic planning.

While at We Energies, Chris developed and implemented a state and national educational campaign which advocated change to a more competitive electric power industry. Chris also served as team leader of corporate communications and as chief corporate spokesperson. In early 1996, he worked with a small team to develop and implement one of the country's first and most successful green pricing initiatives. From mid-1998 until he joined Alliant Energy, Chris served as senior strategist, focusing on competitive market development and renewable energy strategy for We Energies.

Chris has a degree in economics from UW-Madison and resides in Sun Prairie with his wife, Diane.

Giri Venkataraman

Giri Venkataraman studied electrical engineering at the Government College of Technology, Coimbatore, India, and received his B.S. from the University of Madras, India. He moved to the United States to continue his studies and obtained his M.S. and Ph.D. from Caltech and UW-Madison, respectively.

At Wisconsin, he worked on several projects including aircraft power conversion, resonant DC link converters, and unity power factor power converters. During his doctoral studies, he also completed an industrial internship at GE Corporate Research and Development in Schenectady, NY, and an academic internship at the Institute for Power Electronics and Electric Drives at Aachen University of Technology in Germany.

Upon graduation, Dr. Venkataraman moved west to take a teaching appointment at Montana State University-Bozeman. For seven years, he taught electrical engineering, developed several courses, and designed and commissioned a power electronics and drives lab. He has focused his research on the development of pulse width modulated AC-AC power conversion technology.

He completed several research projects in the area of utility power electronics and control and power quality funded by NSF, NASA, EPRI, and several private industries.

Dr. Venkataramanan returned to UW-Madison as a faculty member in 1999. Since his return, he has been active in expanding and modernizing the laboratory infrastructure, while continuing to direct research in various areas of power conversion. He has been actively conducting research in the areas of power converter topologies, microgrids, wind power systems, grid interface for electric vehicles, utility scale power electronic systems and electrification for unserved communities. He is an active member in the IEEE Industry Applications Society, participating in various technical committees of the Industrial Power Conversion Department. He holds seven U.S. patents and regularly contributes to various power electronics conferences and journals.

Dr. Venkataramanan complements his interests in power electronics with educational activism both inside and outside the classroom, developing hands-on student projects aimed at increasing learning effectiveness and addressing energy development issues. In recognition of his teaching excellence he won the Gerald Holdridge Teaching Award, the 2008 Benjamin Smith Reynolds Award for Excellence in Teaching and the UW-Madison Chancellor's Award for Distinguished Teaching. He serves as the faculty advisor for Engineers without borders and HKN student organizations. He is known on campus for his leadership in developing the Undergraduate certificate program in Engineering for Energy Sustainability, his work on small scale wind turbine and photovoltaic installations and inspiring students on various sustainability activities across the board.

Steve Ventura

Steve Ventura is a Professor of Environmental Studies and Soil Science, Director of the Land Information and Computer Graphics Facility in the College of Agricultural and Life Sciences, and Director of the Land Tenure Center in the Nelson Institute of Environmental Studies at UW-Madison. His expertise is in land and geographic information systems. Current research includes community and regional food systems, sustainability of bioenergy crops, land use planning, and natural resource management. He teaches courses on geographic information systems (GIS) and environmental impact assessment.

Kevin Vesperman

Mr. Vesperman is currently the administrator for the Division of Energy Services, which runs the federal and state funded low-income energy assistance and energy efficiency (weatherization) programs, and the State Energy Office (formerly the Office of Energy Independence).

Mr. Vesperman has over 30 years of experience in the energy industry, which included positions at a utility in the environmental area, fossil fuel procurement (coal), business development (the deregulated side of the utility), and electric generation project development. These development efforts included a combustion turbine peaking facility (permitted and constructed), and two coal fired generation facilities. In that role, Kevin was the company expert on site and technology selection, carbon capture and sequestration, utilization of biomass, and the role of new base load coal in reducing GHG emissions.

After working for the utility, Kevin has been an energy consultant and worked on the UW Charter Street biomass generation project, and other biomass and bio-gasification projects, and electric and gas rate case issues.

Kevin received a B.S. in Civil Engineering at UW-Platteville, and an M.S. in Civil and Environmental Engineering at UW-Madison.

David Walker

David Walker has over 30 years' experience in business management, primarily with high-tech startups. In 1994, Mr. Walker co-founded DCH Technology, Inc., a publicly traded high-tech energy and safety equipment company located in Valencia, California. He served for six years alternatively as the President and Vice President of Operations of DCH until his retirement in 2000. During his tenure at DCH, Mr. Walker negotiated license and joint venture agreements and oversaw the listing of the company on the American Stock Exchange after completing approximately \$10 million in private placements.

In 2005, he founded Enable IPC Corporation, the parent of SolRayo, a Madison-based company focused on utilizing nanoparticles to enhance the performance of energy storage devices. Mr. Walker is currently serving as Chief Operations Officer of SolRayo.

He has served on the boards of directors of four privately held for-profit companies and one nonprofit company, and more recently served on advisory boards at the UCLA School of Public Health and California Baptist University.

Paul P.H. Wilson

Paul Wilson is an Associate Professor of Nuclear Engineering in UW-Madison's Department of Engineering Physics, Chair of the Energy Analysis and Policy (EAP) Program of the Nelson Institute for Environmental Studies, and an affiliate of the Holtz Center for Science and Technology Studies. His research interests use computational science to explore the boundary between technical and policy issues: analysis methods of isotopic inventories in nuclear systems and the implications on radioactive waste and nuclear non-proliferation policy, and the development of next generation nuclear power systems to fulfill a role in future energy needs. Paul joined UW-Madison as an assistant professor in August 2001 as part of the Energy Systems and Policy Hiring Initiative.

Born in Edinburgh, Scotland, and raised in Fort Saskatchewan, Alberta, Canada, Paul specialized in the Nuclear Power option of the Engineering Science program at the University of Toronto. After receiving his Bachelor of Applied Science in Engineering Science, he began his graduate schooling in nuclear engineering at UW-Madison. After three years, he moved to Karlsruhe, Germany, where he studied in the Institute for Neutron Physics and Reactor Engineering, earning his Dr.-Ing. degree in Mechanical Engineering in 1998. Returning to Madison, Paul completed his Ph.D. in Nuclear Engineering in 1999.

Paul was the founding President of the North American Young Generation in Nuclear [NA-YGN], an organization created to provide unique opportunities to young professionals in all fields of nuclear science & technology. Paul has been active in the American Nuclear Society for over 17 years, including membership in various committees and chairing the Student Sections Committee and the Special Committee on Electronic Communications and Publications. Paul also represented the ANS and NA-YGN at the international climate change negotiations in Buenos Aires, Argentina (1998), and Bonn, Germany (1999). He is a member of the American and Canadian Nuclear Societies, the American Society for Engineering Education and the NA-YGN.

Corey Zarecki

Corey is responsible for the technical engineering support and operations for Gundersen Lutheran Envision®. He develops and oversees construction for renewable energy projects, and manages the daily operations of the Gundersen Lutheran Envision portfolio. Additionally, he identifies new project opportunities, fosters partnerships and drives operational improvements, which help to advance the Gundersen Lutheran Envision brand.

In his time at Gundersen Lutheran, Corey also initiated and led business solutions and process improvement as an efficiency improvement leader. Prior to joining Gundersen Lutheran in 2008, Corey was employed as the director of Customer Satisfaction and Six Sigma for Trane Commercial Systems. During his eight-year career with Trane, he also held positions of Six Sigma leader and certified Six Sigma-Lean master black belt driving business solutions through process improvement philosophies. He served as a teacher and mentor to hundreds of peers around the world. Prior to his work at Trane, Corey held a number of project engineering and leadership roles at several chemical companies.

Corey received a Bachelor of Science in Chemical Engineering from UW-Madison and holds a patent for high density printed circuit substrate and method of fabrication.

Josh Zepnick

Josh Zepnick was born and raised in Milwaukee where he lives with his wife Barbara. Josh graduated from Rufus King High School, has a B.A. from the University of Wisconsin, and received a Masters in Public Policy from the University of Minnesota in 1998. Representative Zepnick is a full-time Legislator and was a former Project consultant for the Milwaukee Jobs Initiative, Milwaukee Community Service Corps, and Urban Economic Development Association of Wisconsin. Josh has also served as a Research Associate at the Center for Democracy and Citizenship; he is a former Aide to State Senator Bob Jauch and Congressman David R. Obey. Representative Zepnick was elected to the Assembly 2002; reelected since 2004. Representative Zepnick is a member of the Jackson Park Neighborhood Association, Jackson Park Business Association, South Side Business Club. Josh is also a former member of the UFCW, Local 1444.