

ADVANCED ENERGY 2010

NEW YORK STATE'S PREMIER CONFERENCE FOR ADVANCED ENERGY

November 8 & 9, 2010 • New York Hilton • New York • USA



CONFERENCE PROGRAM



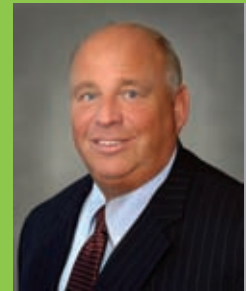
ADVANCED ENERGY
RESEARCH & TECHNOLOGY CENTER

WELCOME TO ADVANCED ENERGY 2010

Welcome to the most important conference you will attend this year on the most important subject on our national agenda. If you are reading this on November 8 or 9, 2010, at Advanced Energy 2010, you don't need anyone else to tell you why energy is the crucial challenge facing humanity today. You get it and you are here for answers, ideas and new questions. You've come to the right place.

Last year's conference was the biggest such event ever held in New York State to address this critical issue, and Advanced Energy 2010 has leaped far beyond it. We have moved to a larger venue this year with an even larger two-day schedule of more than 220 energy subject matter experts, organized into 49 sessions in 7 tracks to dig deeply into these profound and diverse issues. We are especially pleased to partner again with Brookhaven National Laboratory and the U.S. Department of Energy on four dedicated sessions. DOE representatives will showcase advanced programs from our national energy laboratory system and the Offices of Science, Electricity, Energy Efficiency and Renewable Energy. Additional program partners this year include the New York Battery and Energy Storage Technology Consortium (NY-BEST), the New York Energy Policy Institute (NYEPI), the New York State Smart Grid Consortium (NYSSGC), the College of Engineering at the University At Buffalo, Syracuse University's Center of Excellence, Cornell University, NYU-POLY and much coordination, content and planning from NYSERDA and NYPA.

The Smart Grid, as a subset of a larger Smart Infrastructure, is a major aspect of the industrial transformation that is creating the energy industry of the future, where the electric power grid will be made "smart" enough not only to cope with projected growth curves, but also to meet the challenge of seamlessly integrating alternative and renewable sources. The challenges are of historic proportions, but so are the possibilities. You will be hearing about many of these New York State programs including those housed at the Advanced Energy Center.



WELCOME TO ADVANCED ENERGY 2010

This conference could not take place without the generous support of our humbly large number of sponsors, who have given unstintingly not only of their tangible resources but also of their knowledge and expertise to help create a program of lasting value for all participants. You will see the sponsors' names in many forms, but we want to extend our personal thanks here:

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We also wish to acknowledge the extraordinary support the Advanced Energy Center has received from our state government, Governor David A. Paterson, and particularly the Long Island delegation to the New York State Senate, including Senate Minority Leader Dean Skelos and Ranking Member of the Senate Higher Education Committee Kenneth P. LaValle. Without their vision and strong leadership, the AEC's home would not be at this moment preparing for its imminent opening, the first Platinum LEED research facility in the state.

With our best wishes for effective energy research and early and rapid deployment,

Mr. Richard M. Kessel
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President and
Chief Executive Officer

Mr. Frank Murray
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President and
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Mr. Robert B. Catell
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A WORD FROM OUR HOSTS

Aging infrastructures, increasing energy demand and sustainability concerns present our industry with a tremendous opportunity to drive global innovation. As the largest per capita consumers of energy in the world, the United States has both the opportunity and the responsibility to be at the forefront of this revolution. Our forward-thinking decisions today will deliver a secure, robust energy landscape tomorrow.

GE is honored to sponsor the 2010 Advanced Energy Conference. We welcome each of you to this event – and congratulate you on your commitment to modernizing the way we generate, deliver and consume energy.



- **Bob Gilligan,**
Vice President, GE's Digital Energy business

As the Advanced Energy Conference demonstrates, New York's unique mix of technology, talent, capital and policies makes our state fertile ground for clean technology companies to thrive and grow for decades to come. Driven by ambitious clean energy targets and supported by a strong partnership between academia and the public and private sectors, New York's innovation economy will continue to produce cutting edge energy solutions needed to meet the challenges of the future. In our support of the clean energy industry, NYSERDA offers funding and assistance to help business develop, demonstrate and commercialize energy innovations, so that all New Yorkers can increase their energy efficiency, save money, and reduce their reliance on fossil fuels.



- **Francis J. Murray,**
NYSERDA President and CEO

The Advanced Energy 2010 Conference is a great opportunity for clean energy pioneers to spotlight what's taking place for advancing renewable energy supplies and promoting a more efficient and reliable electric power system. This is an exciting time in our industry for capitalizing on 'smart-grid' and clean energy technologies for improving the operation of generating, transmission and distribution facilities while combating global-warming greenhouse gas emissions and creating new high-tech jobs. The Advanced Energy Conference will reinforce these ideas and underscore the importance New York is giving to clean energy technologies for furthering the state's economy and environment.



- **Richard M. Kessel,**
President and Chief Executive Officer of the New York Power Authority

"We have met the enemy and he is us" is as true about our insatiable appetite for energy today as it was 40 years ago when the phrase was coined in reference to the impact of pollution on our planet. In fact, its implications may be even more significant today since we have discovered much about reversing damage done and how to preserve the quality of our environment, and yet remain substantially challenged to effectively do so.

As a top research university, Stony Brook believes in and thrives on the power of innovation. It is a source of great pride to be part of an institution at which some of the newest discoveries and technology in advanced and renewable energy have emerged a result of intense dedication of our faculty, students and staff, with support from the National Science Foundation and other important funding sources, and in collaboration with business and community leaders.

Through the **Advanced Energy Research and Technology Center**, Stony Brook will continue to reach out in these ways. The exceptional program offered at Advanced Energy 2010 will open countless opportunities as we prepare to share information, advance technology and find solutions to our energy challenges.



We are still at the beginning of the learning curve when it comes to developing ideas and technology that will help us reverse harmful energy trends so we can successfully increase energy efficiency; reduce our carbon footprint; and, do more of what we need and want to do with less energy. We are in the right place at the right time, because Advanced Energy 2010 has brought together a great many people with very interesting ideas and solutions in all of these key areas.

- **Dr. Samuel L. Stanley,**
President, Stony Brook University

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KEYNOTE SPEAKERS



DR. GEORGE ARNOLD
National Coordinator for Smart Grid Interoperability
National Institute of Standards and Technology (NIST)

George Arnold was appointed National Coordinator for Smart Grid Interoperability at the National Institute of Standards and Technology (NIST) in April 2009. He is responsible for leading the development of standards underpinning the nation's Smart Grid. Dr. Arnold joined NIST in September 2006 as Deputy Director, Technology Services, after a 33-year career in the telecommunications and information technology industry.

Dr. Arnold served as Chairman of the Board of the American National Standards Institute (ANSI), a private, non-profit organization that coordinates the U.S. voluntary standardization and conformity assessment system, from 2003 to 2005. He served as President of the IEEE Standards Association in 2007-2008 and Vice President-Policy for the International Organization for Standardization (ISO) in 2006-2009.

Dr. Arnold previously served as a Vice-President at Lucent Technologies Bell Laboratories where he directed the company's global standards efforts. His organization played a leading role in the development of international standards for Intelligent Networks and IP-based Next Generation Networks. In previous assignments at AT&T Bell Laboratories he had responsibilities in network planning, systems engineering, and application of information technology to automate operations and maintenance of the nationwide telecommunications network.

Dr. Arnold received a Doctor of Engineering Science degree in Electrical Engineering and Computer Science from Columbia University in 1978. He is a Senior Member of the IEEE.



ROBERT CATELL
Chairman of the Advanced Energy Center
Chairman of the New York Smart Grid Consortium

Mr. Catell was formerly the Chairman and Chief Executive Officer of KeySpan Corporation and KeySpan Energy Delivery, the former Brooklyn Union. His career with Brooklyn Union started in 1958. He became Chairman, National Grid, U.S., following the acquisition, by National Grid, of KeySpan Corporation.

Mr. Catell is Chairman of Alberta Northeast Gas Ltd., and a member of the board of directors of KEY-ERA Energy Management Ltd.

He is also the Chair of New York State Foundation for Science, Technology and Innovation (NYSTAR), Cristo Rey Network's Lourdes Academy, and Futures in Education Endowment Fund.

Mr. Catell is Chair of the New York Energy Policy Institute's Advisory Council (NYEPI), the Leadership Advisory Cabinet to the "Long Island Regional Planning Council" for the LI 2035 Regional Comprehensive Sustainability Plan, and the Green Regional Industry Advisory Council of "Long Island Works Coalition."



DR. YET-MING CHIANG
Kyocera Professor, Department of Materials Science and Engineering
at Massachusetts Institute of Technology (MIT)
Co-founder of A123 Systems & 24M Technologies

Yet-Ming Chiang is Kyocera Professor in the Department of Materials Science and Engineering at Massachusetts Institute of Technology (MIT). He holds S.B. and Sc.D. degrees from MIT. His work primarily focuses on advanced materials and their role in technology, especially clean energy technologies. Chiang is a member of the National Academy of Engineering and a Fellow of the American Ceramic Society and the Materials Research Society. He has received the American Ceramic Society's Ross Coffin Purdy, R. M. Fulrath, and F. H. Norton awards. He has published about 200 scholarly articles and one textbook, and holds about 20 issued patents and 30 pending patent applications (excluding substantially identical foreign filings). Chiang is a co-founder of four companies: American Superconductor Corporation, A123 Systems, Entra Pharmaceuticals, and 24M Technologies. He serves on numerous government panels including the U.S. DOE Basic Energy Sciences Advisory Committee and the National Materials Advisory Board.

KEYNOTE SPEAKERS



THOMAS CONGDON
Deputy Secretary for Energy
New York State

Thomas Congdon is currently the Deputy Secretary for Energy in the administration of Governor David A. Paterson. Mr. Congdon has served in the Executive Chamber since February 2007. As the Chairman of the New York State Energy Planning Board, Mr. Congdon oversaw the development of the 2009 State Energy Plan. Mr. Congdon also serves on the Board of the New York Smart Grid Consortium.

Previously, Mr. Congdon served as a policy analyst in the New York State Attorney General's Environmental Protection Bureau. Prior to joining the Attorney General's Office, he was the policy director at the New York League of Conservation Voters.

Mr. Congdon received his Bachelor of Science in Geology from the University at Albany and his Master of Public Administration from Baruch College.



ROBERT GARDNER
Manager, Economics & Energy Division
Exxon Mobil Corporation

Rob Gardner is the Manager for the Energy and Economics Division of the Exxon Mobil Corporate Strategic Planning Department based in Irving, Texas. Rob assumed his current assignment in April 2009. The group that he manages is responsible for preparing Exxon Mobil's Energy Outlook.

Rob graduated from Louisiana State University in 1978 with a Bachelor of Science degree in Chemical Engineering and began working for Mobil Oil in a series of technical and supervisory engineering positions in gas plants along the U.S. Gulf Coast. Rob then moved into natural gas marketing.

In 1990, he moved overseas and worked in gas marketing area primarily associated with liquefied natural gas. He held positions in Indonesia, Qatar, Japan and Singapore involved in marketing and project development of LNG, natural gas and power projects. In 2001, Rob began a series of management assignments in ExxonMobil Gas and Power Marketing in Houston before taking on his current role.



BOB GILLIGAN
Vice President
GE Energy Services, Digital Energy

Mr. Gilligan is vice president of GE Energy Services' Digital Energy business and an officer of the General Electric Company. The Digital Energy business provides integrated smart grid solutions and reliable power delivery systems to electric utilities as well as the oil & gas, critical infrastructure and industrial sectors. Smart grid is the marriage of information and automation technologies with our electrical infrastructure to support our 21st Century global energy needs...enabling us to do more with less through increased efficiencies. Mr. Gilligan is leading the charge to bring GE to the forefront of smarter grid technologies. The business also supports the oil & gas, critical infrastructure and industrial sectors with innovative technology solutions.

As a global advocate of a smarter grid, Mr. Gilligan has addressed key audiences at numerous policy and industry events. Some highlights include providing testimony on Capitol Hill and keynote addresses at CIRED in Prague, the Smart Grid Forum in Sydney, Chatham House in London, and GridWeek in Washington DC. Mr. Gilligan's expertise has been sought by numerous media professionals, and he has contributed most recently to smart grid features in *Fortune*, the *Financial Times*, *Wall Street Journal*, *New York Times*, *USA Today*, *Associated Press*, *Bloomberg* and *Reuters*.

Mr. Gilligan is an executive sponsor of the GE Hispanic Forum, and he is actively involved with GE Volunteers and Habitat for Humanity. He is a frequent advisor to NEMA (National Electrical Manufacturers Association) and is an advisor to the MIT Energy Initiative's "Future of the Grid" Study.

Mr. Gilligan holds an MBA from the Wharton School, University of Pennsylvania and a bachelor's degree in Mechanical Engineering from Bucknell University.

KEYNOTE SPEAKERS



RICHARD M. KESSEL
President and Chief Executive Officer
New York Power Authority (NYPA)

Richard M. Kessel took office as president and chief executive officer of the New York Power Authority, the nation's largest state-owned electric utility, on October 14, 2008.

Mr. Kessel, an expert on New York energy issues, served as chairman and chief executive officer of the Long Island Power Authority (LIPA) from 1997 to 2006, and as chief executive officer in 2007. Prior to this, he served as LIPA chairman from 1989 to 1997. Mr. Kessel was responsible for several notable achievements during his tenure at LIPA.

Mr. Kessel helped negotiate LIPA's acquisition of Long Island Lighting Company, which contributed to an immediate reduction in utility rates on Long Island. Mr. Kessel led the decommissioning of the Shoreham Nuclear Power Plant, the first closing of a commercial nuclear facility in the United States. Mr. Kessel received regional and national recognition for LIPA's commitment to the next generation of clean energy technologies such as fuel cells and wind power.

Mr. Kessel began his career in public service as Executive Director of the New York State Consumer Protection Board from 1983 to 1995, where he successfully negotiated rate freeze agreements with Consolidated Edison, Niagara Mohawk, and Orange and Rockland Utilities. Mr. Kessel was a Professor of Consumer Studies at Five Towns College from 1995 to 1997. He also taught at Brooklyn College from 1975-1983.

He served on the Board of Trustees for Nassau County Community College from 1981 to 2000, and was appointed to serve on the Nassau County Interim Finance Authority from 2000 until 2007. Mr. Kessel attended Colgate University and then received a bachelor's degree from New York University and his master's degree from Columbia University.



KEVIN S. LAW
President and Chief Executive Officer Long Island Association

Kevin Law became President and CEO of the Long Island Association on September 7, 2010. He intends to focus on creating a better business climate in order to create the new jobs the region so desperately needs and to help unify the region to help strengthen Long Island as a place to live, work and do business.

Previously, Mr. Law was President and CEO of the Long Island Power Authority. Mr. Law also served as Chief Deputy County Executive and General Counsel for Suffolk County, where he had direct oversight of all county departments consisting of 12,000 employees and a \$2.7 billion budget. Mr. Law was also Managing Partner of the Long Island office of Nixon Peabody LLP, an international law firm with over 800 attorneys. Previously, Mr. Law was Director of Real Estate for the Suffolk County Department of Law and the Assistant Suffolk County Executive for Planning, Housing and Environmental Affairs.

In 2009, Mr. Law was appointed by Governor Paterson as Chairman of the Stony Brook University Council. He also currently sits on the Boards of the Advanced Energy Research Technology Center, Energeia and New York's Health Insurance Exchange and is the Vice Chairman of the Long Island Housing Partnership.



DR. JOHN H. MARBURGER
Science Advisor & Director of the Office of Science and Technology Policy
President George W. Bush Administration
Vice President of Research, Stony Brook University

John H. Marburger, III is Vice President for Research and University Professor in the departments of Physics, Electrical Engineering, and Society and Technology at Stony Brook University. He served as Science Advisor to the President and Director of the Office of Science and Technology Policy during the George W. Bush Administration (2001-2009), and was Director of Brookhaven National Laboratory from 1998. As President of Stony Brook University (1980-1994) Marburger served on numerous boards and committees, including chairmanship of Governor Cuomo's Commission on the Shoreham Nuclear Power facility, and chairmanship of Universities Research Association which operates Fermi National Accelerator Laboratory. He began his academic career at the University of Southern California in 1967 where he was Professor of Physics and Electrical Engineering, and served as Chairman of the Physics Department and later as Dean of the College of Letters, Arts and Sciences. Marburger attended Princeton University (A.B. Physics 1962) and Stanford University (Ph.D. Applied Physics 1967). He is a theoretical physicist specializing in nonlinear and quantum optics.

Marburger's tenure as the President's Science Advisor, the longest in history, began immediately following the terrorist attacks of September 11, 2001 and included major policy initiatives associated with the establishment of the Department of Homeland Security, re-orientation of the nation's space policy following the crash of the Columbia space shuttle in 2003, and the American Competitiveness Initiative that aimed to double federal funding for the physical sciences and engineering.

KEYNOTE SPEAKERS



FRANK MURRAY
President and Chief Executive Officer
New York State Energy Research and Development authority (NYSERDA)

Frank was appointed President and CEO on January 26, 2009. Prior to his appointment, Frank served as Senior Advisor at the international environmental consulting firm Ecology and Environment, Inc. Frank was previously a policy advisor to the United States Secretary of Energy, assisting in the development of the Clinton Administration's national energy policy.

In the early 90's, Frank served as the New York State Commissioner of Energy and Chairman of the NYSERDA Board of Directors. He also served as Chairman of the State Energy Planning Board, a multi-agency statutory board charged with the responsibility of developing a comprehensive energy plan for the State that integrated State energy, environmental and economic development policies.

In 1985, Frank was appointed Deputy Secretary to Governor Cuomo for Energy and the Environment, a position he held until 1992. He represented New York in numerous national and regional energy and environmental activities, including the Coalition of Northeastern Governors, the National Governors' Association, and the Council of Great Lakes Governors. Frank began his work on New York State energy issues as legislative counsel and then as an energy and environmental policy advisor to Governor Hugh Carey.



HONORABLE DAVID A. PATERSON
Governor of New York State

David A. Paterson became New York's 55th Governor on March 17, 2008. Governor Paterson was born May 20, 1954 in Brooklyn, NY to Portia and Basil Paterson, the first non-white Secretary of State in New York and the first African-American Vice-Chair of the National Democratic Party. He earned his bachelor's degree in History from Columbia University in 1977, and completed his J.D. at Hofstra Law School in 1982. In 1985, at the age of 31, Governor Paterson was elected to represent Harlem in the New York State Senate, becoming the youngest Senator in Albany at the time. In 2003, he became the first non-white legislative leader in New York's history when he was elevated to Minority Leader of the Senate. He made history again in 2004 when he became the first visually impaired person to address the Democratic National Convention and again in 2007 when he became New York's first African-American Lieutenant Governor.

As Lieutenant Governor, he led the charge on several crucial issues for New York's future including achieving legislation for stem cell research, working to prevent domestic violence, putting forth a state-wide renewable energy strategy and championing the expansion of minority and women owned businesses in New York.

In 2009, Governor Paterson set a goal to meet 45 percent of the State's electricity demand through efficiency and renewables by 2015. In order to meet this '45 by 15' goal, the Paterson Administration has overseen an unprecedented expansion of the State's clean energy programs, including the approval of \$950 million in energy efficiency programs through 2011 and an increase of the State's renewable portfolio standard to 30 percent of statewide electricity demand by 2015.

Recognizing the important role that New York's academic institutions and industrial base play in meeting the State's energy and economic challenges, the Governor has fostered public-private partnerships to speed the rate of innovation in clean tech. In 2009 the Governor created the New York Battery and Energy Storage Technology Consortium and the New York Energy Policy Institute, and his Administration was instrumental in creating the New York Smart Grid Consortium.

The Governor enacted several key pieces of legislation to advance his clean energy agenda, including: the Green Jobs Green New York Act, PACE Financing, net metering expansion for distributed renewable energy systems, an expansion of the New York Power Authority's energy efficiency programs, and new efficiency standards for consumer products.

In 2008 the Governor reconstituted the State's Energy Planning Board and in 2009 published the first State Energy Plan since 2002. The Governor also signed Executive Order 24, which established a state goal of an 80-percent reduction in greenhouse gas emissions by the year 2050 and called for the development of a climate action plan to identify strategies that the state could pursue to reach that goal.

He lives with his wife, Michelle Paige Paterson, and their two children, Ashley and Alex.

KEYNOTE SPEAKERS



SCOTT PUGH
Energy Security Liaison, S&T Directorate Interagency Division
United States Department of Homeland Security

Scott Pugh joined DHS in 2007 as Special Assistant to the Honorable Jay M. Cohen, Under Secretary of Homeland Security for Science and Technology. He currently serves as Energy Security Liaison in the Science and Technology Directorate Interagency Division. In 2009 he was Executive Secretary of a White House Task Force on Electric Grid Vulnerabilities and coordinated an interagency electric grid wargame. He is a member of the Federal Smart Grid Task Force.

As a civilian he served as a member of the 2006 - 2008 Defense Science Board Energy Strategy Task Force and as Military Principal at Rocky Mountain Institute.

Scott retired from the Navy as a Captain in 2005 having served as Commanding Officer of a nuclear powered attack submarine and as Director of the College of Mathematics and Science at the Naval Academy. He is a physics graduate of the Naval Academy and the Naval Postgraduate School.



EDWARD REINFURT
Executive Director
New York State Foundation for Science, Technology and Innovation (NYSTAR)

Edward Reinfurt serves as Executive Director of the New York State Foundation for Science, Technology and Innovation.

Under Mr. Reinfurt's leadership, NYSTAR is helping to identify how New York's existing research assets can be leveraged to create greater opportunities for technology development throughout the State.

On February 10, 2009, Governor David A. Paterson announced Mr. Reinfurt's appointment to the New York State Economic Recovery and Reinvestment Cabinet. The cabinet was created to manage the development of State and local infrastructure projects financed through the federal American Recovery and Reinvestment Act. Currently, NYSTAR is involved in the administration of Governor Paterson's New Innovation Economy Matching Grants Program. Under this program New York is committing up to a 10% match in State funds for each ARRA awardee in strategic areas of innovation.

In May 2009, Mr. Reinfurt was appointed to the Task Force on Diversifying the New York State Economy through Industry-Higher Education Partnerships which will submit recommendations on accelerating business growth and commercialization of research technologies. In June 2009, Mr. Reinfurt was appointed by Governor David A. Paterson to the New York Small Business Task Force which will focus existing State resources and develop new strategies to promote the growth and development of small business enterprises in New York.

As executive director of NYSTAR, Mr. Reinfurt is a member of the Economic Development Subcabinet of Governor Paterson. He also serves as a member of the New York State Broadband and Deployment Council.



DR. YACOV SHAMASH
Vice President for Economic Development
Dean, College of Engineering and Applied Sciences
Stony Brook University

Dr. Shamash is Vice President for Economic Development and the Dean of the College of Engineering and Applied Sciences at Stony Brook University. As Vice President, Dr. Shamash supervises the University's three incubators, two New York State Centers for Advanced Technology, the Center of Excellence in Wireless and Information Technology (CEWIT), the Advanced Energy Research and Technology Center, the Small Business Development Center, and the workforce development programs of the Center for Emerging Technologies. The College of Engineering and Applied Sciences has more than 2,000 undergraduate and 1,000 graduate students. During his tenure, College research expenditures have increased six fold to \$30M per year. In 1994 he helped establish the highly successful state-wide SPIR program (Strategic Partnership for Industrial Resurgence). During the past ten years, working through the SPIR program, the College has partnered with more than 395 companies to assist them with more than 2,127 projects.

Prior to joining SUNY Stony Brook in 1992, Dr. Shamash served as the Director of the School of Electrical Engineering and Computer Science at Washington State University when he established the National Science Foundation Industry/University Center for the Design of Analog/Digital Integrated Circuits.

He is a member of the Board of Directors of Keytronic Corp., American Medical Alert Corp., and Applied DNA, Inc. He is also a member of the Board of Directors for the New York State Office of

KEYNOTE SPEAKERS

Science, Technology and Academic Research (NYSTAR), the Long Island Software & Technology Network (LISTnet) and the Long Island Angel Network.

Dr. Shamash has also held faculty positions at Florida Atlantic University, the University of Pennsylvania and Tel Aviv University. He received his undergraduate and graduate degrees from Imperial College of Science and Technology in London, England. He has authored more than 130 publications and is a Fellow of the IEEE.



DR. SAMUEL L. STANLEY
President
Stony Brook University

On July 1, 2009, Samuel L. Stanley Jr., M.D., became the fifth president of Stony Brook University, taking the helm of one of the nation's most prestigious research institutions. One of just 63 members of the invitation-only Association of American Universities, Stony Brook is recognized for its innovative programs, groundbreaking discoveries, and integration of research with undergraduate education.

A highly distinguished biomedical researcher, Dr. Stanley was one of the nation's highest recipients of support from the National Institutes of Health (NIH) for his research focusing on enhanced defense against emerging infectious diseases. He is an expert in the biological mechanisms that cells employ when responding to infectious agents such as parasites, bacteria, and viruses, a process commonly called the inflammatory response.

Prior to coming to Stony Brook, Dr. Stanley served as vice chancellor for research at Washington University in Saint Louis, where he was responsible for the university's research, overseeing an enterprise that generated more than \$500 million annually. As the institutional official responsible for all compliance programs, he oversaw the university community's adherence to guidelines governing the responsible and ethical conduct of research.

A Seattle native, Dr. Stanley has a Bachelor of Arts degree in biological sciences (Phi Beta Kappa) from the University of Chicago. After earning his medical degree from Harvard Medical School in 1980, he completed his resident-physician training at Massachusetts General Hospital. In 1983 he began a fellowship in infectious diseases at Washington University School of Medicine, became a professor of medicine in 1999, and in 2004 was appointed a professor in the Department of Molecular Microbiology in recognition of the collaborative nature of his research.

Dr. Stanley serves on the SUNY Strategic Planning Steering Committee, which plays a pivotal role in shaping the development of SUNY's new Strategic Plan that will guide SUNY for the next five years and the University for the next ten. As chair of Brookhaven Science Associates, which co-manages Brookhaven National Laboratory with Battelle Memorial Institute, Dr. Stanley joins the leaders of a select group of prestigious academic institutions including Cornell, Princeton, Stanford, the University of California-Berkeley, and the University of Chicago in co-managing and collaborating with a national laboratory. He also serves on the boards of the SUNY Research Foundation, Cold Spring Harbor Laboratory, Goodwill Industries of Greater NY and NJ, the Long Island Association, and the Long Island Regional Advisory Council on Higher Education (LIRACHE). Dr. Stanley has received an Honorary Doctorate Degree in Science from Konkuk University in Korea.

Generating an estimated \$4.7 billion annually in regional economic impact, Stony Brook is playing a vital role in Long Island's transformation into a major technological corridor, bringing new innovations in wireless technology, clean energy, diagnostic and sensor systems, and medical biotechnology to the area. Stony Brook faculty members are credited with more than 1,500 inventions and more than 400 U.S. patents, and our research enterprise generates \$160 million in revenue annually. With the newly created New York Energy Policy Institute—a consortium of research centers and experts to advise the State on energy policy—housed at the Advanced Energy Research and Technology Center (AERTC) at Stony Brook, the University will assume a leading role in our region's well-being for years to come.

KEYNOTE SPEAKERS



DR. STARNES WALKER
Director of Research, S&T Directorate
United States Department of Homeland Security

Dr. Walker was recruited from the Office of Naval Research (ONR) to be the Director of Research for the U.S. Department of Homeland Security. At ONR he served as Technical Director and Chief Scientist and top civilian for the Naval S&T program for the US Navy & Marine Corps. Currently as Director of Research for DHS, Walker oversees the Office of National Laboratories, the Office of University Programs for the DHS Centers of Excellence, the four DHS in-house laboratories and T&E Centers, and the Academic Fellowship and Scholarship Program Office. Additionally Walker serves as the senior S&T leadership representative to OSTP, the Congress, the IC, and OGOs internationally. He joined the S&T Directorate in January, 2007.

Dr. Walker joined the Office of Naval Research in September 2004 and served as the Technical Director and Chief Scientist reporting directly to the Chief of Naval Research. Working with the CNR, Dr. Walker was responsible for structuring and leading an S&T organization that ensures technological superiority for the Navy and Marine Corps. Dr. Walker's budget authority was annually \$2,200M, plus an additional average Congressional plus-up of \$700M, and Dr. Walker served in a supervisory role for a workforce of 5494 civilian and military for ONR and ONR's Corporate Laboratory, the Naval Research Laboratory. Dr. Walker is a former member of the Senior Executive Service and served as the Senior Advisor for Science & Technology to stand up the Defense Threat Reduction Agency (DTRA) from 1999-2003. Dr. Walker was a standing member of the Defense Science & Technology Advisory Group for DDR&E in OSD and served as the senior S&T executive at OSD along with the S&T Executives of the Services, DIA, DARPA, MDA, and the Deputy Under Secretary for S&T.

Dr. Walker holds a B.S., M.S., and a Ph.D. degree in Nuclear Physics from the University of California. He holds an Honorary Degree in Nuclear Engineering from the University of Missouri-Rolla. Dr. Walker has widely published in the fields of physics, chemistry, and optics, with numerous patents issued. He was a Navy Fellow and recipient of three consecutive Naval Weapons Fellowship awards. Dr. Walker is a member of the American Physical Society, American Nuclear Society, and the Cosmos Club.



CHANCELLOR NANCY ZIMPHER
Chancellor of the State University of New York (SUNY)

On June 1, 2009, Nancy Zimpher became the 12th Chancellor of the State University of New York by unanimous vote of the SUNY Board of Trustees. With more than 465,000 students, SUNY is the nation's largest comprehensive system of higher education.

A dynamic and nationally recognized leader, Chancellor Zimpher is known as an effective agent of change in education. She started her career as a teacher in a one-room schoolhouse in the Ozarks and has never lost her passion for providing accessible, quality education for every student.

Chancellor Zimpher began her work at SUNY with a statewide tour of SUNY's 64 campuses, which became the first phase of a systemwide strategic planning process. This plan, called The Power of SUNY, was launched in April 2010, with the central goal of harnessing SUNY's potential to drive economic revitalization and create a better future for every community across New York.

As The Power of SUNY is put into action, the Chancellor is leading a diverse set of new initiatives at SUNY in several key areas, including research and innovation, energy, health care, global affairs, and the education pipeline. She has also been a vocal advocate for groundbreaking legislative reforms that ensure SUNY can continue to provide broad access to higher education in an environment of declining state support, while maximizing its impact as an engine of economic development.

A former chair of the Association of Public and Land-Grant Universities, Dr. Zimpher now leads the national Coalition of Urban Serving Universities and co-chairs a national blue-ribbon panel on transforming teacher preparation. She serves on the board of CEOs for Cities, is a member of the Business-Higher Education Forum, and the Board of Governors of the New York Academy of Sciences.

Prior to coming to SUNY, Dr. Zimpher served as president of the University of Cincinnati, chancellor of the University of Wisconsin-Milwaukee, and executive dean of the Professional Colleges and dean of the College of Education at The Ohio State University.

She has authored or co-authored numerous books, monographs, and academic journal articles on teacher education, urban education, academic leadership, and school/university partnerships.

Chancellor Zimpher holds a bachelor's degree in English Education and Speech, a master's degree in English Literature, and a Ph.D. in Teacher Education and Higher Education Administration, all from The Ohio State University.

SESSION CHAIRPERSONS



DR. OSMAN AHMED
Siemens

*Green Building Technology
System of Systems*



DUSTY BECKER
Emerson Energy Systems

*Power Electronics for
the Smart Grid*



DR. ED BOGUCZ
Syracuse CoE

*Green Building Technology
Materials and Process*



AUBREY BRAZ
Con Edison

*Grid Storage Options
Benefits & Analysis*



DAVID BRENDER
Cooper Development
Association

Energy Efficiency



**CHAIRMAN
GARRY BROWN**
New York State Public
Service Commission

*Technology Options
for Policymakers*



**DONALD
CHAHBAZPOUR**
National Grid

BioMass Processing



KARA CLARK
GE Energy

Onshore Wind Power



**COMMISSIONER
ROBERT CURRY**
New York State Public
Service Commission

*Energy Storage &
Generation*



DR. HARRY DAVITIAN
Entek Power

*Climate Change Impacts
& Adaptation Strategies*



PAUL DECOTIS
LIPA

Energy Policy II



DR. DAVID DIAMOND
Brookhaven National
Laboratory

*D.O.E. Sponsored Small
Modular Nuclear Reactors*



MICHAEL DIXON
Eaton

*Intelligent & Advanced
Transportation I*



DR. JOHN ELTER
SUNY Albany

*Energy Storage -
Chemistries Materials
& Applications II*



DR. DARIO GIL
IBM Energy Research

*Smart Networks I
Modelling and Simulation*

SESSION CHAIRPERSONS



**DR. YANNICK
GLENMAREC**
UNDP/GEF

*Financing the Transition
to Low Carbon Society*



DR. NEERAJ GUPTA
Battelle Memorial
Institute

*D.O.E. Sponsored Carbon
Capture, Sequestration
& Storage*



BONNIE GURRY
NYPA

Solar I Utility Scale Solar



DR. NAY HTUN
Stony Brook University

*Innovative Pathways
toward Low Carbon Society:
Policy & Technologies*



FLORENCE HUDSON
IBM

Smart Infrastructure II



SHARON LAUDISI
NYPA

Offshore Wind Power



DR. JONG-GYU LEE
Woongjin Energy

Solar III PV Solar



**DR. DEVINDER
MAHAJAN**
Brookhaven National
Laboratory

BioFuel Production



**DR. MADHAV
MANJREKAR**
Siemens

Smart Infrastructure I



STEVE MEDWIN
The Raymond Corporation

*Energy Storage Options for
Transportation Applications*



DR. VIKAS MIDHA
General Electric

*Advanced Lighting
Research I*



DR. JIM MISEWICH
Brookhaven National
Laboratory

*D.O.E. Sponsored Energy
Frontier Research Centers*

*D.O.E. Sponsored Smart
Grid 2.0: Challenges
& Opportunities*



**DR. SATYEN
MUKHERJEE**
Philips Research

*Advanced Lighting
Research II*



DENNIS MULLEN
Empire State
Development Corporation

Energy Sector Finance



JAY NATHWANI
D.O.E. Geothermal
Technologies

Geothermal Technologies

SESSION CHAIRPERSONS



ANDREW NAUKAM
Ultralife Corporation

*Chemistries, Materials
& Applications I*



**DR. ROBERT
PAASWELL**
City College of New York

*Intelligent & Advanced
Transportation II*



ALLAN PAGE
Hudson Renewable
Energy Institute

*Policies, the Smart Grid
and Financing Renewables*



JEFFREY PETERSON
NYSERDA

*BioEnergy Options &
Technology*



**DR. MIRIAM
RAFAILOVICH**
Stony Brook University

*Solar IV Materials
and Technologies*



JACQUES ROETH
NYSERDA

Solar II Thermal Solar



JIM ROSSMAN
Lazard Freres

*Cleantech Funding
Lifecycle*



MICHAEL SHIMAZU
NYSERDA

*Innovation and
Entrepreneurship*



UNA SONG
EPA

Green Datacenters I



DR. GERALD STOKES
Brookhaven National
Laboratory

Energy Policy I



**DR. JEFFERSON
TESTER**
Cornell University

Utility Scale Geothermal



DANIEL THANOS
GE Digital Energy

*Smart Networks II
Cybersecurity*



GREG TROPSHA
Ice Energy

*Energy Storage Options-
Mechanical and Phase
Change Storage*



DR. JAMES WGRZYN
Brookhaven National
Laboratory

*BioEnergy Science
& Technology*



STEPHEN WHITLEY
NYISO

Sensors for the Smart Grid

CONFERENCE AGENDA

Monday, November 8

7:45am - 9:15am

OPENING KEYNOTE & MODERATOR: Frank Murray (NYSERDA)

TRACK A BEEKMAN PARLOR

Energy Policy I

CHAIRPERSON – Dr. Gerald Stokes,
Brookhaven National Lab
Regional Energy Policy: Leadership for the nation

Christian Brosseau, HydroQuebec
*Meeting Energy Needs with Clean
and Renewable Power*

Janet Joseph, NYSERDA
Energy and Climate Policy in New York State

Dr. Anthony Joseph, NYS DOL
*Clean Energy Policy Challenges –
Balancing Mutually Exclusive Objectives*

TRACK B SUTTON PARLOR NORTH

Innovation and Entrepreneurship

CHAIRPERSON – Michael Shimazu, NYSERDA
Clean Energy Innovation and Entrepreneurship

Micah Kotch, NYC ACRE

Michael Herzig, Locus Energy

Andrew Clark, IBM Research

Reed Sarver, GeoEnergy Enterprises

Russell Tencer, Wind Products

TRACK C SUTTON PARLOR CENTER

Smart Networks I Modeling and Simulation

CHAIRPERSON – Dr. Dario Gil,
IBM Energy Research
Smarter Energy for a Smarter Planet

Dr. Eugene Feinberg, Stony Brook University
*Stochastic Modeling and Supercomputing
for Smart Grids*

Dr. Lei Wu, Clarkson University
Stochastic Security of Power Systems Operation

Lloyd Treinish, IBM Deep Thunder
*Applications of Weather Modelling
for Smarter Grids*

SESSION I 9:30am - 10:45am

45 MINUTE BREAK

11:30am - 2:00pm

Welcome – Introductions – Keynotes

30 MINUTE BREAK

SESSION II 2:30pm - 3:45pm

Energy Policy II

CHAIRPERSON – Paul DeCotis, LIPA

Charles Fox, ZeroPoint

Dr. Thomas Perry, NREL

Dr. James Winebrake, RIT

Dr. Susan Tierney, The Analysis Group

Cleantech Funding Lifecycle

CHAIRPERSON – Jim Rossman, Lazard Freres

Craig Cornelius, Hudson Clean Energy

William Lese, Braemar Energy Ventures

Mark Florian, First Reserve Corporation

Smart Networks II Cybersecurity

CHAIRPERSON – Daniel Thanos,
GE Digital Energy
Future Directions in Smart Grid Security

Dr. Kathleen Robertson, Athena Strategies
Cyber Security in a New Energy Dynamic

Kenneth Van Meter, Lockheed Martin
Moving to a Real-Time Cybersecurity Model

Todd Lowe, SiCore
*Anti-Tamper Technologies for
Critical Information Protection*

30 MINUTE BREAK

SESSION III 4:15pm - 5:30pm

Technology Options for Policymakers

CHAIRPERSON – Chairman Garry Brown,
New York State Public Service Commission
Role of the Regulator: Professional Skeptic

Dr. Reza Ghafurian, Con Edison
Smart Grid In Urban Environment

Stephen Gunthrie, Enerpath
*Technology Enabled Large-Scale
Energy Efficiency Program*

Kathryn Brown, Verizon
Three Challenges for Policy Makers

Power Electronics for the Smart Grid

CHAIRPERSON – Dusty Becker,
Emerson Energy Systems
Power Electronics and the Smart Grid

Dr. Leo Casey, SatCon
Advanced Power Electronics in Inverter Applications

Dr. Douglas Hopkins, University At Buffalo
Solid-State Protection: Dual-Use for Microgrids

Dr. Deepak Divan, Georgia Tech/IPIC
Dynamic Control of Grid Assets

Smart Networks III Cybersecurity

CHAIRPERSON – Scott Pugh,
U.S. Department of Homeland Security

Dr. Robert Johnson, Stony Brook University

Dr. Jeffrey Katz, IBM Energy & Utility

Ernie Hayden, Verizon

5:30pm - 7:30pm

Reception

–

Exhibits

CONFERENCE AGENDA

Special Breakfast – The Business of CleanTech – Panel Discussion

Kenneth Adams (BCNYS), Bruce Bailey (AWS True Power), Patricia Glaza (Clean Technology and Sustainable Industries), Stephen Filler (Prism Solar Technologies Inc.)

TRACK D SUTTON PARLOR SOUTH

Advanced Lighting Research I

CHAIRPERSON – Dr. Vikas Midha,
General Electric
Future Trends in Lighting

Daniel Lax, Autronic Plastic
LED Lighting Technology in Unique Applications

Scott Ziegenfus, Lutron
Lighting Control for Intelligent Sustainable Buildings

TRACK E REGENT PARLOR

D.O.E. Sponsored Small Modular Nuclear Reactors

CHAIRPERSON – Dr. David Diamond,
Brookhaven National Lab
Small Modular Reactors — Smaller and Smarter

Dr. Paul Farrell,
Brookhaven Technology Group
*A Compact, Lightweight, Transportable
Nuclear Reactor System*

Jeffrey Boaz, Hyperion Power
*Small Modular Reactors (SMR's);
Enhancing Nuclear Resurgence*

Dr. Earl Saito, GE Hitachi
PRISM: Cost Reduction Using Sodium Reactors

TRACK F NASSAU SUITE A

Energy Storage Options for Transportation Applications

CHAIRPERSON – Steve Medwin,
The Raymond Corporation
Managing Energy Storage Options in Forklift Trucks

Dr. Mark Mathias, General Motors
*Electrification Technology and the
Future of the Automobile*

Tom Apalenek, BAE Systems
Energy Storage for Transportation and More

Tim Richter, General Electric
*Electrification Challenges and Energy
Storage Solutions*

TRACK G NASSAU SUITE B

Innovative Pathways toward Low Carbon Society: Policy and Technologies

CHAIRPERSON – Dr. Nay Htun, Stony
Brook University

Hon. Ketil Solvik-Olsen, Norway Parliament
Norway's Policy Towards Low Carbon Paradigm

Frank Dalene, Telemark
Functional Net Zero, Carbon Neutral Technologies

Peter Gilbert, CA Technologies
Unlocking Sustainability - Why IT Holds the Key

Kevin Neumaier, Ecology & Environment
Lower Carbon; Lower Cost; Better Existence

Robert Catell (Chair of Advanced Energy Center, NYSmart Grid Consortium), Dr. Samuel Stanley (President of Stony Brook University), Chancellor Nancy Zimpher (SUNY), Richard Kessel (NYPA), Bob Gilligan (GE Energy), Dr. John Marburger (former Science Advisor to the President), Special Energy Keynote

Advanced Lighting Research II

CHAIRPERSON – Dr. Satyen Mukherjee
Philips Research
Advanced Lighting for Outdoor Applications

Dr. Nadarajah Narendran,
Rensselaer Polytechnic Institute
Evaluating LED Lighting with Application Metrics

Ian Hendler, Leviton
Commercial Lighting Control Technologies

Brian Chemel, Digital Lumens
*How Intelligence Drives
Radical Efficiency in Lighting*

Intelligent and Advanced Transportation I

CHAIRPERSON – Michael Dixon, Eaton
EV Charging Infrastructure: Trends and Solutions

Dr. Laura Wynter, IBM Research
Smarter Transportation Analytics

Dr. Yuko Nakanishi, Intelligent Transportation
Intelligent Transportation in New York State

Alain Steven, Viridity Energy
Impact of Energy Markets on Transit Systems

Grid Storage Options Benefits & Analysis

CHAIRPERSON – Aubrey Braz, Con Edison
Smart Grid and Energy Storage Integration

Mark Henley, Boeing
Grid-Scale Energy Storage Technology Opportunities

Richard Fioravanti, KEMA
*Impacts of Current Electricity
Storage Implementations*

Dr. James Powell, Maglev Storage
Maglev Energy Storage and the Grid

Financing the Transition to Low Carbon Society

CHAIRPERSON – Dr. Yannick Glenmarec
UNDP / GEF
Engineering Investibility

Olav Kjørven, United Nations
Low Carbon Climate Resilient Development Strategy

Mark Fulton, Deutsche Bank
GET FIT in Developing Countries

Sandy Taft, National Grid

Energy Efficiency

CHAIRPERSON – David Brender,
Cooper Development Association
*Distribution Transformer
Energy Efficiency Regulations*

Kevin Carriere, Powerton Global
*Improving Thermal Transfer
Through Nanomagnetism – Permanently!*

Mike Bakalyar, Gardner Denver
Compressed Air Systems - Best Practice Efficiency

Evens Jourdain, NYPA
Real-Time Diagnostics and Monitoring

Intelligent and Advanced Transportation II

CHAIRPERSON – Dr. Robert Paaswell,
City College of New York

Tim Roughan, National Grid
Proposed Northeast Low Carbon Fuel Standard

Joseph Ambrosio, ElectroMotive Designs
Medium and Heavy Duty EV/HEV Deployment

Todd Jackson, General Electric
Advanced Vehicle Charging Station

Collette Ericsson, MTA NYC Transit
The Long & Winding Road to Zero

Energy Storage & Generation

CHAIRPERSON – Com. Robert Curry,
New York Public Service Commission

SPECIAL KEYNOTE
Dr. Yet-Ming Chiang, MIT, A123, & M24
Advanced Energy Storage

Dr. Frank Zeman (NYIT)
PHEVs as Electron Storage Devices

Adrian Corless, Plug Power
Fuel Cell Hybrids for Material Handling

Dr. Robert Miller, Paper Battery Company
Print Formed Energy Storage Sheets

D.O.E. Sponsored Carbon Capture, Sequestration & Storage

CHAIRPERSON – Dr. Neeraj Gupta,
Battelle Memorial Institute
Field Testing for CO2 Geologic Storage

Brian Slater, New York State Museum
New York State Carbon Sequestration Potential

Dr. John Marin, NYSERDA
Carbon Sequestration in New York

Dr. Timothy Carone, Northrop Grumman
Remote Sensing and Carbon Sequestration

– **Poster Session**

CONFERENCE AGENDA

Tuesday, November 9

7:45am - 8:45am

WELCOME BY DEAN YACOV SHAMASH

Breakfast - Keynotes Edward Reinfurt (NYSTAR),

SESSION IV 9:00am - 10:15am

30 MINUTE BREAK

SESSION V 10:45am - 12:00 noon

25 MINUTE BREAK

12:25pm - 1:55pm

SESSION VI 2:15pm - 3:30pm

SESSION VII 3:45pm - 5:00pm

TRACK A

BEEKMAN PARLOR

Climate Change Impacts & Adaption Strategies

CHAIRPERSON – Dr. Harry Davitian, Entek Power

Dr. Cynthia Rosenzweig, NASA Goddard Institute
Climate Change and its Impacts on New York State

Dr. Malcolm Bowman, Stony Brook University
NYC/LI Rising Sea Levels, Storm Surges

Alan Belenz, NYS Office of Climate Change
Planning for New York's Changing Climate

Mark Way, Swiss RE
*Climate Risk and Climate Adaptation:
a reinsurer perspective*

Energy Sector Finance

CHAIRPERSON – Dennis Mullen, Empire State Development Corporation

Larry Siegel, Tobay Capital

Ross Ain, Caithness

Mitchell Dong, Mohave Sun Power

Constantine Kontokosta, New York University

TRACK B

SUTTON PARLOR NORTH

Solar I Utility Scale Solar

CHAIRPERSON – Bonnie Gurry, NYPA
100MW New York Distributed PV Initiative

Doug Pelleymounter, Advanced Energy Industries, Inc.
LVRT: Stability in Grid-Tie PV

Fouad Dagher, National Grid
Large Scale Utility Owned Photovoltaic Systems

Elie Nasr, SMA America
Evolution of PV Interconnection Requirements

Solar II Thermal Solar

CHAIRPERSON – Jacques Roeth, NYSERDA
Solar Thermal – Promoting Adoption

Steven Levine, Infinia
Focus Your Energy: The Infinia PowerDish™

Jeff Perlman, BrightPower
Solar Thermal Nuances in Multifamily Buildings

Adam Farrell, SunMaxx Solar
*Commercial Solar Thermal System Design
& System Optimization*

TRACK C

SUTTON PARLOR CENTER

Smart Networks Interoperability

CHAIRPERSON – Dr. George Arnold, NIST

John McDonald, GE Digital Energy

Robert Burke, ISO-NE
Gridwise Architecture Council

Dr. Peter Tippet, Verizon

Smart Infrastructure I

CHAIRPERSON – Dr. Madhav Manjrekar, Siemens
Electronic Power Interface

Jamshid Sharif-Askary, GE Energy
*Helping Utilities Anticipate Asset Potential -
Holistic Approach*

Diane Blankenhorn, National Grid
Electric Business Challenges

Dr. Denis Faubert, HydroQuebec
Smart Grid - A R&D Perspective from Quebec

Lunch – Keynotes Robert Catell (Chair of Advanced Energy Center, NYSmart Grid Consortium),

Policies, the Smart Grid and Financing Renewables

CHAIRPERSON – Allan Page, Hudson Renewable Energy Institute

Charles Freni, Central Hudson Gas & Electric

Scott Medla, TAG Energy

Raymond Wuslich, Winston & Strawn

Richard Dewey, NYISO

Solar III PV Solar

CHAIRPERSON – Dr. Jong-Gyu Lee, Woongjin Energy
Polysilicon for Solar Cells

Brian Grenko, Yingli Solar
Better Longer Smarter Stronger Solar Power

James Huff, abakus solar AG
State PV Feed-in Tariff Creation

David Hebert, Spire Solar Systems
PV Solar from Process to Deployment

D.O.E. Sponsored Smart Grid 2.0: Challenges & Opportunities

CHAIRPERSON – Dr. Jim Misewich, Brookhaven National Lab

Dr. Mani Vadari, Battelle Energy Technology
Active Demand Management

Carl Imhoff, Pacific Northwest National Laboratory
Capturing New Smart Grid Value Streams

Bob Hawsey, National Renewable Energy Laboratory
Integrating Renewables and the Smart Grid

Tom King, Oak Ridge National Laboratory
How Do We Become Energy Independent?

Sensors for the Smart Grid

CHAIRPERSON – Stephen Whitley, NYISO
True Grid

Mark Adamiak, GE Multilin
Smart Grid Architecture Development

Dr. Michael Gouzman, Sensor CAT Stony Brook University
Sensors for Smart AC+DC Grids

Dr. George Stefanopoulos, NYPA
PMU Data Analysis and Smart Grid Applications

Solar IV Materials and Technologies

CHAIRPERSON – Dr. Miriam Rafailovich, Stony Brook University
Engineering Nanocomposite Heterodyne Junction Photovoltaic Cells

Dr. James Glimm, Stony Brook University
A Supercomputing Study of Photo Voltaic Quantum Dots

Dr. Glen R. Kowach, City College of NY
Thermoelectric Materials for Large Thermal Gradients

Smart Infrastructure II

CHAIRPERSON – Florence Hudson, IBM
Smarter Infrastructure - Building a Smarter Planet

Mike Wojcik, Verizon
Leveraging Public Wireless Networks for Smart Grid Deployments

Dr. Farshad Khorrami, NYU-POLY
Adaptive Fault-Tolerant Control for Smart Grid Application

Dr. Jon Longtin, Stony Brook University
High-Resolution Metering for Gas Meters

CONFERENCE AGENDA

Kevin Law (LIA), Thomas Congdon (Deputy Secretary of Energy for NYS), Scott Pugh (Department of Homeland Security)

TRACK D

SUTTON PARLOR SOUTH

Utility Scale Geothermal

CHAIRPERSON – Dr. Jefferson Tester, Cornell University
Geothermal Co-generation Opportunities in New York

Lucien Bronicki, Ormat Technologies
Implementing New Power Plant Technologies

Dr. John Martin, NYSERDA
New York State Geothermal Overview

Geothermal Technologies

CHAIRPERSON – Jay Nathwani, D.O.E. Geothermal Technologies
U.S. DOE Portfolio of Geothermal Technologies

Louis Capuano, ThermaSource
Geothermal Drilling 101: How to Drill a Geothermal Well

Shawn Genung, GeoEnergy Enterprise
The GeoColumn - Geothermal Made Easy

TRACK E

REGENT PARLOR

Green Building Technology System of Systems

CHAIRPERSON – Dr. Osman Ahmed, Siemens
Green building integration-Lesson from Green Human

Jerry Skaggs, UL DQS
Energy and Quality Management Working Together

Alessandro Meynardi, Verizon
The Network Effect

Dr. Franklin Schuling, Philips Research
Lighting Centric Holistic Green Buildings System Solutions

Green Building Technology Materials and Process

CHAIRPERSON – Dr. Ed Bogucz, SyracuseCoE
NY's Energy Regional Innovation Cluster

Dr. Alexander Orlov, Stony Brook University
New Materials for Environmental and Sustainable Energy Applications

Brendan Owens, U.S. Green Building Council
Promoting leadership in building performance

Jerry Polly, Flad Architects
Energy Research Facilities - A Whole New Game

TRACK F

NASSAU SUITE A

Energy Storage - Chemistries, Materials & Applications I

CHAIRPERSON – Andrew Naukam, Ultralife Corporation
Multiple Energy Source Energy Storage

Robert Misback, Altairnano
Applications for Advanced Energy Storage- New Technologies

Martin Klein, CUNY Energy Institute
Nickel-Zinc Flow Battery

Matt Fronk, RIT/NY-BEST
Battery Cell Durability within a Pack

Gary Blake, Delphi
Solid Oxide Fuel Cell Development

D.O.E. Sponsored Energy Frontier Research Centers

CHAIRPERSON – Dr. Jim Misewich, Brookhaven National Lab

Dr. Peter Johnson, Emergent Superconductivity
Center for Emergent Superconductivity

Dr. Thomas Miebach, GE Research
Virtual Hydrogen Storage for Fuel Cells

Dr. Glenn Amatucci, Rutgers University
Approaching New Horizons In Lithium Batteries

Dr. James Yardley, Columbia University
New Horizons in Organic Photovoltaic Cells

TRACK G

NASSAU SUITE B

BioEnergy Options & Technology

Chairperson – Jeffrey Peterson, NYSERDA
The Question of Sustainability

SPECIAL KEYNOTE
Robert Gardner, Exxon Mobil

Carlos Pereira, U.S. Army
Renewable Power and Energy Systems for Defense Needs

Dr. Kevin Hicks, USDA-ARS
Winter Barley Ethanol and Other New Advanced Biofuels

BioMass Processing

CHAIRPERSON – Donald Chahbazpour, National Grid
Renewable Gas

Dr. Hazem Tawfik, SUNY Farmingdale
Combined Heat and Power (CHP) using Hydrogen from Biomass

Dr. Thomas Butcher, Brookhaven National Labs
Biofuels from Regional Waste Sources

Dr. Douglas Goodale, SUNY Cobleskill/U.S. Army
Gasification Feedstock Hydrokinetics

Honorable David A. Paterson (Governor of New York State), Dr. George Arnold (NIST, National Director of Smart Grid Interoperability)

Green Datacenters I

CHAIRPERSON – Una Song, EPA - Energy Star
EPA ENERGY STAR Impacts on Data Center Efficiency

Dr. Roger Schmidt, IBM
Energy Efficient Data Center Designs

Dr. Michael Patterson, Intel
Innovative Data Center Efficiency Techniques

Dr. Rami Rihani, Accenture
Enablers for a Green Data Center

Green Datacenters II

CHAIRPERSON – Philip Meyers, Morgan Stanley
Advanced Datacenters

Dhesikan Ananchaperaul, CA Technologies
Greening an IT Cloud

Edward Koplin, AFCO Systems, Xnth
"Chips for Bricks" – Sustainable Data Centers

James Gowen, Verizon
The Green Data Center

Offshore Wind Power

CHAIRPERSON – Sharon Laudisi, NYPA

Dr. Caleb Gordon, Pandion Systems

Anthony Camarota, Epox-Z

Dan Zaweski, LIPA

Dr. Mohammed Safiuddin, University At Buffalo

Onshore Wind Power

CHAIRPERSON – Kara Clark, GE Energy
Integrating High Penetrations of Wind and Solar Energy

Michael Tyson, Suzlon Wind Energy
Wind Turbine Monitoring and Control

Dr. Luciano Castillo, Rensselaer Polytechnic Institute
The Importance of Turbulence in Wind Energy

William Bradshaw, Dayton T. Brown
Testing of Advanced Energy Systems

Energy Storage - Chemistries, Materials & Applications II

CHAIRPERSON – Dr. John Elter, SUNY Albany
Metal-Air Batteries: Opportunities and Challenges

Dr. Brian Landi, RIT
Carbon Nanotubes for Lithium Ion Batteries

Dr. Karim Zaghib, HydroQuebec
Safe Li-ion For Green Transportation

Thomas Mazz, Aeroflex Laboratories
Autonomous Battery Balancing-Safe, Reliable and Scalable

Energy Storage Options- Mechanical and Phase Change Storage

CHAIRPERSON – Greg Tropsha, Ice Energy
Distributed Storage: Peak Reduction and System Efficiency

Tom Welsh, National Grid
Advances in Energy Storage (from a Utility Perspective)

Chet Lyons, Beacon Power
20 Megawatt Flywheel Energy Storage Plant

Dr. Li Kou, NYPA
Investigation of Compressed Air Energy Storage

BioFuel Production

CHAIRPERSON – Dr. Devinder Mahajan, Brookhaven National Lab
Atom Economical Biofuel Production from Biomass

Randal Goodfellow, Envergent
Pyrolysis Oil to Stationary & Transportation Fuels

Dr. Benjamin Hsaio, Stony Brook University
Breakthrough Energy-Saving Nanofibrous Membrane Technology

Jonathan Rhone, Nexterra Systems Corp.
Advanced Biomass Gasification For Heat and Power Applications

BioEnergy Science & Technology

CHAIRPERSON – James Wegrzyn, Brookhaven National Lab

Marianne Mintz, Argonne National Labs
Renewable Natural Gas as a Vehicle Fuel

Dr. Gail Richardson, Energy Vision
Optimal Technology "Fit" - Biomethane for Trucks

Kurt Sorschak, Xebec Corporation
Renewable Gas in Transportation

CONCURRENT ENERGY MEETINGS

(All meetings are by invite only)

NEW YORK STATE GREEN JOBS STUDY – LMI (LABOR MARKET INTELLIGENCE)

Bryant Suite, November 8th at 9:45 AM

For more information contact:
Pat Malone - 631.632.8433



KEYNOTE



BRUCE HERMAN
Deputy Commissioner for
Workforce Development,
New York State
Department of Labor



PAT MALONE
Executive Director,
Advanced Energy
Training Institute (AETI),
Advanced Energy Center,
Stony Brook University



KAREN VILLENEUVE
Director of
Residential Efficiency and
Affordability Program,
NYSERDA, Green Jobs/
Green New York



FRANK SURDEY
Managing Economist,
NYS Department of Labor



RONNIE KAUDER
Green Jobs Research
Director, NYC Labor
Market Information
Service



JOHN TWOMEY
Executive Director,
NYATEP

PANELISTS

MODERATOR

MODERATOR



MATT FRONK
RIT, CHAIRMAN NY-BEST

NY- BEST: MARCH 2011 ANNUAL MEETING

Schedule information available soon.

For more information contact:
Jason Doling - 518.862.1090 ext. 3558



MODERATOR



ROBERT CATELL
Chairman New York State
Smart Grid Consortium

NYSMART GRID CONSORTIUM

Gibson Suite, November 8th at 7 PM

For more information contact:
Anne Hesse - 646.472.2096



CONCURRENT ENERGY MEETINGS

(All meetings are by invite only)

MODERATOR



NYE-RIC SYRACUSE CoE
Bryant Suite, Nov. 8th at 7:30 PM

For more information contact:
Tammy Rosanio - 315.443.3433



DR. ED BOGUCZ
Syracuse CoE

MODERATORS



NEPI
Regent Parlor, Nov. 8th at 8:30 PM

For more information contact:
Dr. Guodong Sun - 631.632.3241



DR. GERALD STOKES
Brookhaven National
Laboratory

DR. GUODONG SUN
Stony Brook University



MEDIA BRIEFING
Murray Hill Suite, Nov. 8th at 10:30 AM

For more information contact:
Jack Kramer - 917.658.7048



JACK KRAMER

AERTC MISSION STATEMENT

The **Advanced Energy Center (AERTC)** located at Stony Brook University is a true partnership of Academic institutions, Research institutions, Energy providers and Industrial Corporations. Its mission is innovative energy research, education and technology deployment with a focus on efficiency, conservation, renewable energy and nanotechnology applications for new and novel sources of energy.

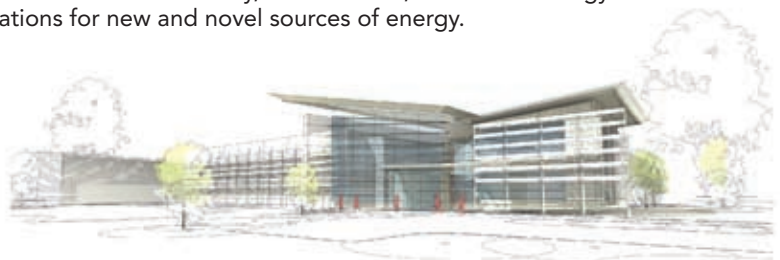


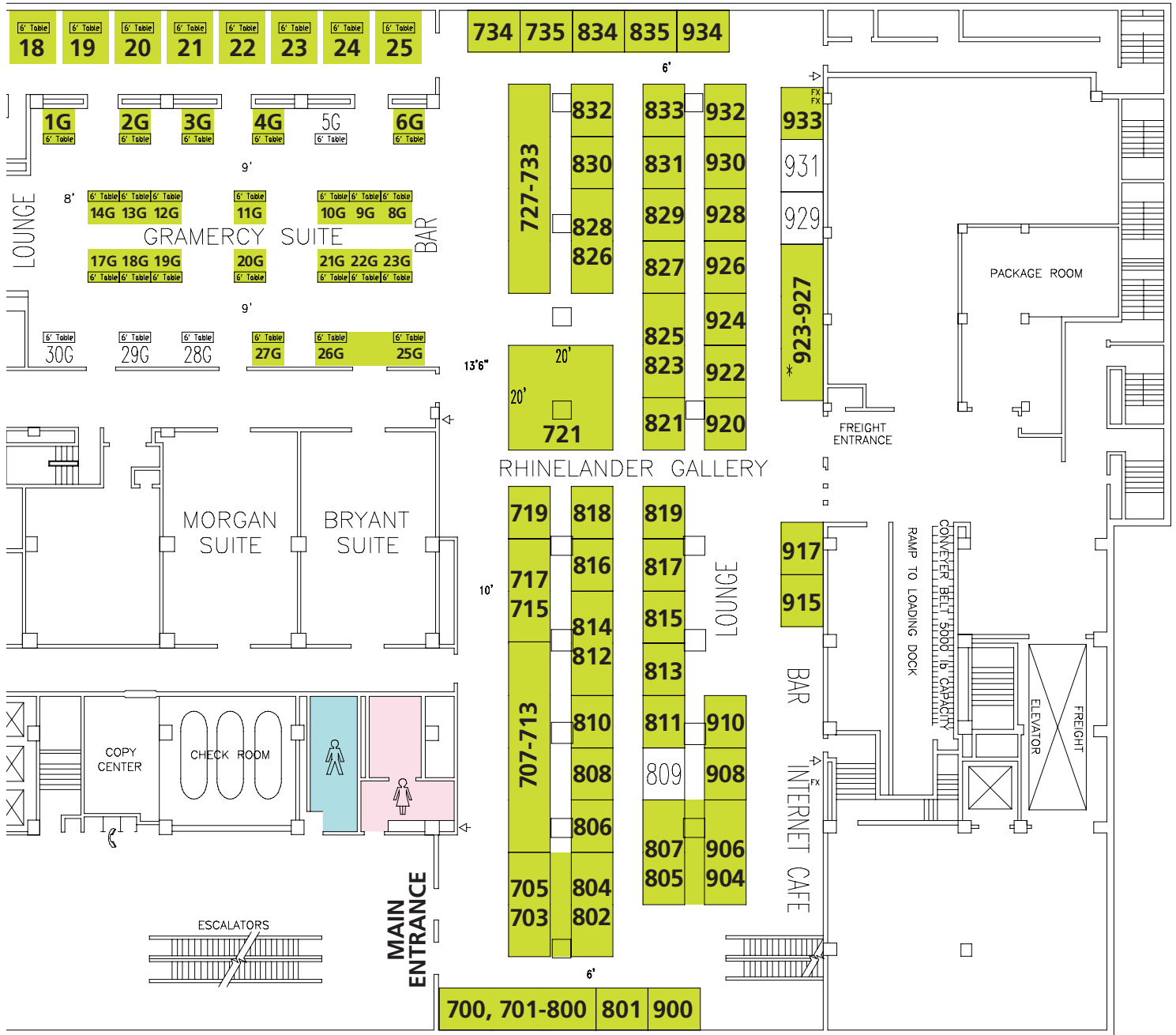
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GE Energy

Digital Energy, a division of GE Energy, is a major solutions provider and thought leader for the global Smart Grid effort to modernize and optimize how we generate, move and consume energy. Our global team of more than 5,000 employees are inventing, improving and integrating communications, automation, and power delivery technologies to give the century-old electric infrastructure new capabilities and reliable, efficient performance unheard of just a generation ago.

From deploying Internet-like solutions that enable consumers to understand and manage energy usage to championing leading-edge technologies that make clean, renewable energy an everyday reality, Digital Energy is delivering the breakthroughs that will power our planet for the next hundred years. Our executives are leading the charge, serving on standards boards, industry task forces and government advisory committees, sharing our unmatched experience and expertise to help overcome the capacity and environmental challenges of an increasingly electrified world. We are delivering Real.Smart.Solutions today.



New York State Energy Research and Development Authority (NYSERDA)

The New York State Energy Research and Development Authority (NYSERDA) is a public benefit corporation actively involved in all aspects of New York's energy landscape. NYSEDA provides technical assistance and financial incentives to New York energy consumers in an effort to promote the implementation of energy efficiency improvements; research, development and demonstration of new and renewable technologies; and sustainable decision making, across all sectors. NYSEDA's programs and initiatives span Energy, Environment, Economy and Education. Visit us at: www.nyserda.org



New York Power Authority

The New York Power Authority is the nation's largest state-owned electric utility and one of New York's leading electricity suppliers. Approximately 75 percent of NYPA's generation comes from hydropower.

The Power Authority was created in 1931 to produce and deliver economical hydropower to the people of New York State. Today, with 18 generating facilities and 1,400 circuit-miles of transmission lines, NYPA is energizing New York's economy with reliable supplies of lower-cost electricity. More than 400,000 jobs exist statewide because of NYPA's Power for Jobs and other economic development programs.

A national leader in promoting energy efficiency and alternative energy initiatives, NYPA has initiated plans to develop large-scale solar and wind power projects across the state. It also has one of the largest clean transportation programs in the Northeast. Additional details on how the Power Authority is generating more than electricity for New York is available at www.nypa.gov



Stony Brook University

Stony Brook University ranks among the top 1 percent of the world's universities by the London Times Higher Education—QS World University Rankings and is a member of the elite Association of American Universities. Stony Brook's reach extends from its 1,000-acre campus encompassing the main academic areas, an 8,300-seat stadium and sports complex, a performing arts center, Stony Brook University Medical Center, the Health Sciences Center, and the Long Island State Veterans Home to Stony Brook Manhattan, the Research and Development Park, three business incubators, and Stony Brook Southampton. Stony Brook also co-manages Brookhaven National Laboratory in partnership with Battelle Memorial Institute, joining an elite group of universities that run federal laboratories. Visit us at: www.stonybrook.edu



IBM

IBM understands how sustainability is a 21st century business imperative -- one that is not only concerned about the environment but also economic growth and the long term viability of organizations, industries, and societies. Sustainability on a smarter planet means gathering, synthesizing and applying information in new ways to benefit economic, environmental and operational strategies of an organization. By leveraging its business consulting, IT services, enterprise software, hardware systems and financing capabilities, IBM helps clients measure and manage the sustainability of their organizations' IT, people, information, products, property, and business operations. It also helps develop strategies that prioritize current and future investments, while also revealing opportunities for an organization to thrive and grow.

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Long Island Power Authority

The Long Island Power Authority (LIPA) was created in 1998 as a non-profit state authority and Long Island's primary electric service provider. It owns the retail electric transmission and distribution system on Long Island and provides electric service to more than 1.1 million customers in Nassau and Suffolk counties and the Rockaway Peninsula in Queens. LIPA's mission is to provide highly reliable and economical electric service through our valued workforce with a commitment to superior customer service, accountability and transparency in all of our operations, while being recognized as a leader in the advancement of efficiency and renewable energy.

LIPA is the 2nd largest municipal electric utility in the nation in terms of electric revenues, 3rd largest in terms of customers served and the 7th largest in terms of electricity delivered. LIPA's mission is the delivery of safe, reliable and economical electric service to our customers and advancing energy efficiency and renewable energy initiatives to foster economic stability and growth.

Under LIPA President and CEO Kevin S. Law, the utility has accomplished numerous key tasks such as; managing costs, protecting the environment, and upholding LIPA's keen reputation for reliability.

Visit us at: www.lipower.org

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National Grid

National Grid is an international energy delivery company. In the U.S., National Grid delivers electricity to approximately 3.3 million customers in Massachusetts, New Hampshire, New York and Rhode Island, and manages the electricity network on Long Island under an agreement with the Long Island Power Authority (LIPA). It is the largest distributor of natural gas in the northeastern U.S., serving approximately 3.4 million customers in Massachusetts, New Hampshire, New York and Rhode Island. National Grid also owns over 4,000 megawatts of contracted electricity generation that provides power to over one million LIPA customers. Visit us at: www.nationalgridus.com



Verizon

Verizon Communications Inc. (NYSE:VZ), headquartered in New York, is a global leader in delivering multiple communications and information technology services to consumers, businesses, government and wholesale customers. Verizon provides converged communications, information and entertainment services over the nation's most advanced fiber-optic network. The company delivers innovative and seamless secure, information and communications solutions to customers around the world. Verizon Wireless operates America's most reliable wireless network, serving more than 87 million customers and businesses nationwide. A Dow 30 company, Verizon employs a diverse workforce of more than 235,000 and last year generated consolidated operating revenues of more than \$97 billion. Visit us at: www.verizon.com



Brookhaven National Laboratory

The U.S. Department of Energy's Brookhaven National Laboratory conducts research in the physical, biomedical, and environmental sciences, energy technologies, and national security. Brookhaven also builds and operates major scientific facilities available to university, industry and government researchers. Brookhaven is managed by Brookhaven Science Associates, a 50/50 partnership between Stony Brook University and Battelle. Visit us at: www.bnl.gov



U.S. Department of Energy

The Department of Energy's overarching mission is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex. The Department of Energy oversees the nation's preeminent federal laboratory complex, and leverages significant investments in R&D to advance its mission.

Today the Department is investing in science to achieve transformational discoveries; fostering the revolution in energy supply and demand while positioning the United States to lead on global climate change policy; increasing American economic competitiveness; and maintaining the nuclear deterrent, reducing the risk of nuclear proliferation, and advancing nuclear legacy cleanup.



CA

CA Technologies (NASDAQ: CA) is an IT management software and solutions company with expertise across all IT environments – from mainframe and distributed, to virtual and cloud. CA Technologies manages and secures IT environments and enables customers to deliver more flexible IT services. CA Technologies innovative products and services provide the insight and control essential for IT organizations to power business agility. The majority of the Global Fortune 500 relies on CA Technologies to manage evolving IT ecosystems. Visit us at: www.ca.com/us



The City College of New York

Since 1847 The City College of New York has provided low-cost, high-quality education for New Yorkers in a wide variety of disciplines. Over 16,000 students pursue undergraduate and graduate degrees in the College of Liberal Arts and Sciences; The Bernard and Anne Spitzer School of Architecture; The School of Education; The Grove School of Engineering, and The Sophie Davis School of Biomedical Education. For additional information, visit www.cuny.edu



Empire State Development

Empire State Development, under the leadership of Chairman and CEO Dennis M. Mullen, is committed to being recognized on a global scale as the economic development engine driving job growth, strategic investment and prosperity in New York State. Beyond its many programs and incentives, ESD assists NYS businesses with technical assistance, including: low-cost financing for facilities and equipment; market development and environmental investment programs designed to encourage capital investments; and green technology resources.



Hydro-Québec

Hydro-Québec generates, transmits and distributes electricity. Its sole shareholder is the Québec government. It uses mainly renewable generating options, in particular hydropower, and supports the development of wind energy through purchases from independent power producers. It also conducts R&D in energy-related fields, including energy efficiency.



NYSTAR

The New York State Foundation for Science, Technology and Innovation (NYSTAR) is charged with growing New York State's investment in high-technology research and economic development and turning that investment into new jobs. A central element of NYSTAR's mission is the recognition that New York's world-class public and private research universities and academic centers are powerful economic development engines that can create high-tech jobs and opportunity in New York.

CONFERENCE SPONSORS



Smart Grid Consortium

NYS Smart Grid Consortium strategically positions NYS to more effectively define and deploy the Smart Grid by harnessing the collective efforts of key stakeholders across the state to implement an energy delivery system that is efficient, secure, and reliable while simultaneously facilitating renewable resources and enabling customers to reduce cost and energy consumption. Visit us online at: www.nyssmartgrid.com



Polytechnic Institute of New York University

Polytechnic Institute of New York University (formerly Polytechnic University), an affiliate of New York University, is one of New York City's most comprehensive schools of engineering, applied sciences, technology, and research, and is rooted in a 156-year tradition of invention, innovation, and entrepreneurship: i2e. Visit us at: www.poly.edu.



Sanna Mattson MacLeod

Sanna Mattson MacLeod is the Advanced Energy 2010 official marketing agency. It is a member firm of the American Association of Advertising Agencies and has a 25-year history of serving technology-based accounts. The agency has deep roots in the energy industry, as well as electronics, bioscience, healthcare and employee recruitment. SMM has also been recognized by Crain's B-to-B magazine as one of America's top 100 business-to-business advertising agencies for five consecutive years. Visit us at: www.smmadagency.com



NYIT

In addition to our 90 undergraduate, graduate, and professional degree programs, New York Institute of Technology's Center for Metropolitan Sustainability supports research and interdisciplinary efforts in the field of alternative energy. More than 15,000 students attend classes at NYIT's campuses in New York, on-line, the Middle East, China, and Canada. Visit us at: www.nyit.edu



AFCO Systems

AFCO Systems is a leader in Green Datacenter Resource Solutions that bridge IT and Facilities to enable a new level of balance, visibility, and control over the critical datacenter resources: power, cooling, and space. Our mission is to support our customers with innovative and leading-edge solutions that deliver exceptional value and benefits across their organization, and provide them with a competitive advantage in their markets.



Northrop Grumman

Northrop Grumman Corporation is a leading global security company whose 120,000 employees provide innovative systems, products, and solutions in aerospace, electronics, information systems, shipbuilding and technical services to government and commercial customers worldwide.



ConEdison

Con Edison is a subsidiary of Consolidated Edison, Inc. [NYSE: ED], one of the nation's largest investor-owned energy companies, with approximately \$13 billion in annual revenues and \$34 billion in assets. The utility provides electric, gas and steam service to more than 3 million customers in New York City and Westchester County, New York.



The City University of New York

As this nation's largest urban university, the City University of New York (CUNY) seeks to play a transformational role in America's sustainable future. Through our Energy Institute, our commercialization program for clean technology at CUNY SustainableWorks, our leadership of the NYC Solar America City Partnership and CUNY's 23 academic institutions commitment to reduce its carbon footprint 30% by 2017, we strive to create a more sustainable future for all. Visit us at: sustainablecuny.org



Advanced Energy Training Institute (AETI)

Stony Brook University, Corporate Education and Training (CET), brings its expertise in professional certification to launch the Advanced Energy Training Institute (AETI) which includes innovative, new programs in energy and sustainability. Working with core partners, the AETI is identifying new credentialing venues and engaging statewide agencies and partners to create a platform for honest credential brokering in the elusive "green" landscape.



Eaton Corporation

Eaton is a diversified power management company and technology leader in electrical components and systems for power quality, distribution and control; hydraulics components, systems and services for industrial and mobile equipment; aerospace fuel, hydraulics and pneumatic systems for commercial and military use; and truck and automotive drivetrain and powertrain systems for performance, fuel economy and safety.



RPI: Center for Future Energy Systems

The Center for Future Energy Systems (CFES) is one of 15 Centers for Advanced Technology (CAT) funded by the New York State Office of Science, Technology and Innovation (NYSTAR). The Center's mission is to connect novel energy materials and systems research, knowledge, and technology in academia to the needs of industry through technology transfer and/or collaborations to spur economic development.



Hudson Clean Energy Partners

Hudson Clean Energy Partners is a leading global private equity firm, dedicated solely to investing in renewable power, alternative fuels, energy efficiency and storage.

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State University of New York

Farmingdale State College

Farmingdale State College equips its students with the resources, knowledge and critical thinking sought by today's emerging industries through education and abundant opportunities in experiential learning. Visit us at: www.farmingdale.edu.



Syracuse Center of Excellence

Syracuse Center of Excellence engages collaborators at 200+ companies and institutions to address global challenges in clean and renewable energy, indoor environmental quality, and water resources.



CEWIT

CEWIT was created to capitalize on the IT and Wireless revolution, spurs economic growth, advance scientific research, and develop technologies of tomorrow. Its mission is three-fold: become recognized as a world leader in interdisciplinary research in emerging, critical technologies of the information and healthcare age; address the skilled technology worker shortage; foster new enterprise development and economic growth.



ATK

With approximately 18,000 employees in 24 states, Alliant Techsystems Inc. (ATK) is a leader in high performance products and systems. ATK's Center for Energy and Aerospace Innovation (CEAI), located at ATK GASL in Ronkonkoma, NY on Long Island is dedicated to advancing technology through research, development, testing and prototyping. www.gasl.net



American Superconductor

AMSC provides utility and industrial customers with Smart Grid technologies that enhance the reliability, efficiency, security and capacity of the grid and seamlessly integrate renewable energy sources into the power infrastructure. Visit us at: www.amsc.com



EmPower CES, LLC

EmPower Solar is a leading solar consulting, engineering, and contracting company that serves residential markets in Long Island and New York City, and commercial markets in the tri-state area.



KEMA

KEMA provides business and technical consulting, operational support, measurement and inspection, testing and certification services for energy clients worldwide, from generation to the consumer side of the meter.



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SPIE is your resource for research and events on light-based technologies, including PV, solar hydrogen, LEDs, laser fusion and energy harvesting. See our targeted events and 300,000-paper Digital Library at www.SPIE.org



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AtmosAir Solutions

AtmosAir Bi-Polar Ionization systems provide proven energy cost savings up to 40% in buildings by using proven total air purification technology resulting in significantly better indoor air quality.



Copper Development Association, Inc.

CDA provides technical resources related to energy efficiency and power quality. Copper for transformers and motors ensures the best reliability and cost effectiveness.



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EcoScience Solutions is a platinum reseller of PermaFrost®, a chemical surface technology utilizing nano-magnetics that permanently improves cooling performance in HVAC and refrigeration systems with an ROI that is measured in months instead of years. Our clients include Citibank, HSBC Bank, JLL, Honeywell, Lane Valente, the U.S. Air Force, and more.

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FLAD Architects

Flad Architects designs environments that enhance human potential. As a strategic planning and design firm, Flad creates facilities for learning, healthcare, and specialized laboratory research. Most recently, Flad provided full architect/engineer services on the Advanced Energy Research & Technology Center at Stony Brook University.



Suffolk County Industrial Development Agency

Suffolk County Executive Steve Levy places high priority on the development of clean technology and green energy. The department of Economic Development/Workforce Housing encourages establishment and expansion of clean tech/clean energy businesses. Suffolk County is a regional leader in energy efficiency and clean energy use in its buildings and fleet. Sponsorship of and attendance at this conference is important to retain Suffolk County's high visibility on this issue and for county officials to have access to the latest innovations in clean energy technology.



FutureTech Enterprise, Inc.

Bob Venero is CEO of an industry-leading full service IT solution provider. Founded in 1996, Future Tech is a dynamic partner for its Fortune 1000 customers who are looking for proven methods of saving money and increasing efficiencies within their global environments. www.ftei.com.



Hoffmann & Baron, LLP

Hoffmann & Baron, LLP is a premier Intellectual Property law firm, possessing expertise in all areas of technology. For over 25 years, Hoffmann & Baron has provided the umbrella of Intellectual Property protection that stimulates innovation and economic growth. Together with inventors and entrepreneurs, Hoffmann & Baron transforms ideas into assets. www.hoffmannbaron.com



LIFT

LIFT is a technology driven economic development organization that serves the region as the NYSTAR Regional Technology Development Center, the U.S Department of Commerce Partner, and the NYS DOL Intermediary in the Manufacturing Sector. LIFT will be showcasing the Applied Science Center for Innovation and Excellence in Homeland Security a unique industry driven collaborative effort that was opened in the spring of 2010.



LIHTI - Stony Brook Incubator System

Stony Brook University has 4 technology incubators. LIHTI, (www.LIHTI.org), has a NYSERDA Clean Energy Business Incubation Program (CEBIP). Our first client is showcased at the conference; SPD Control Systems Corp. (www.spdcontrolsystems.com), provides control systems to "tune" light, glare and heat passing through windows.



Nassau County Industrial Development Agency

The Nassau County Industrial Development Agency offers various types of financial incentives. Benefits are available to eligible companies moving to, remaining in, or relocating within Nassau County and relate to the creation, expansion, improvement or retention of property and facilities within the County. Projects supported by the IDA are generally keyed to the creation and retention of jobs and to economic development within the County.



Networking Magazine

Networking® Magazine, launched in 1991, the only monthly providing readers "who's who, what's what and who and what's green" in NY and around the world. The resource for decision makers, critical link between B2B and NFP worlds to advance corporate interests, vital causes and environmental sustainability; kept as a reference for months. www.NetworkingMagazineUSA.com



PACS Industries, Inc.

NY Independent switchgear manufacturer of Standard and Arc-Resistant switchgear from 5kv through 63 KAS.C @15KV, 40 KA S.C. to 38KV, 1-high or 2- high configuration, see www.pacsindustries.com.



Sustainability Institute at Molloy College

Our Vision : To catalyze Long Island to become a national leader in developing, promoting, and implementing sustainable solutions to environmental and quality of life challenges. Our Mission: To integrate the idea of sustainability into the academic life of Molloy College and to serve as a core resource on environmental responsibility to help ensure a sustainable future for the students and faculty of Molloy College, as well as the larger Long Island community.



Switchgear Solutions Ltd.

Switchgear Solutions Ltd. is a manufacturers' representative in Pennsylvania, Maryland, Delaware, New Jersey and lower METROPOLITAN New York markets specializing in all custom and quick ship applications of transformers, distribution SWITCHGEAR and field testing.



CORIX

Corix helps communities build and manage infrastructure for water, wastewater and sustainable energy. Services include multi-utility systems management, field metering and product distribution.

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IREQ

Hydro-Québec's Research Institute provides technical support to Hydro-Québec's divisions by carrying out technological innovation projects in cooperation with universities, research centers and industry.



Leviton Manufacturing Company

Leviton offers the most complete line of lighting management products in the industry, including products for energy management and architectural controls, residential lighting controls.



Mercury Corporation

Mercury Corporation is a vertically integrated contract manufacturer with over 1.2 million square feet available to our Customers requirements. Mercury specializes in complex low & high volume production, offering state of the art equipment and processes. Internal Services; Lasers, Robotics, Forming, Powder Coat, Injection Molding, you can have a one stop experience for BOM cost reductions. www.mercurycorp.net. Since 1920, Mercury offers innovation and helping Customers go to the next level.



Marathon Engine Systems

Marathon Engine Systems (MES) is a company dedicated to products for long life heat/ power requirements used in residential and light commercial, grid and off-grid applications.



OwnEnergy

OwnEnergy partners with landowners to develop renewable energy projects, with an initial focus on 10-80 MW wind energy projects. Our partners take an active role in the development and installation process and in return they are provided with a significant ownership stake in the resulting renewable energy project.



Lab Volt Systems, Inc.

Lab-Volt is known worldwide for award-winning, hands-on training systems. Our new state-of-the-art Solar/Wind and Solar/Thermal Energy Training Systems/Courseware provide superior alternative/renewable energy training using real-world components.



The Valley Group, a Nexans Company

The Valley Group, a Nexans company's CAT-1 Dynamic Line Rating [DLR] Systems quickly, safely, and economically increase transmission line transfer capacity up to 30%. This transfer results in a direct reduction in congestion, bottlenecks and the associated costs in the transmission network.



UL DQS Inc.

UL DQS Inc. provides independent assessments of management systems to various ISO standards. Expert auditors determine if companies are using the right performance metrics to drive continuous improvement.



Ultralife Corporation

Ultralife Corporation, which began as a battery company, serves its markets with products and services ranging from portable and large energy storage solutions to standby power solutions as well as communications and electronics systems.



Division 7 Inc.

Division 7 Inc. is a New York based general contractor that offers all phases of commercial and residential waterproofing, vegetative roofing, and solar energy throughout the tri-state area.



Northville Industries

A third generation petroleum trading, marketing, storage and distribution company based on Long Island, Northville is committed to selling alternative fuels like bio-heat and E85 gasoline.



Ascension

Ascension Industries, turnkey contract manufacturer for over 35 years, offers design and cost reduction for your green energy equipment project. R&D, Conceptual, Prototype, OEM, Production.



Suffolk County Community College

Suffolk County Community College is a leader in energy efficiency education and training, including energy auditing, solar technology and LEED- certified training.



Utiliworks Consulting, LLC

Utiliworks Consulting is a professional services company that helps utility clients assess, design, procure and deploy advanced metering systems.



World Technology Corporation

World Technology is an innovative Export Management Company focusing on renewable energy technologies. World Technology builds global sales and distribution channels for U.S. renewable companies.

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