Renewable Energy Systems and Sustainability Conference

July 31 - Aug. 1, 2017

Speakers

Welcome Address

Dr. David Norton, Interim Director *– David P. Norton, Ph.D., became vice president for research at the University of Florida in January 2012. He had served as associate dean for research in the UF College of Engineering since 2009. He is also a professor in the Department of Materials Science and Engineering.*

Dr. Norton came to UF in 2000 after 11 years at Oak Ridge National Laboratory. His research interests primarily focus on electronic, photonic and magnetic thin film materials. He has published more than 300 articles in refereed journals and books, presented numerous invited papers and lectures at national and international conferences, and organized conferences and workshops in the areas of electronic oxides and laser processing. He is a Fellow of the American Vacuum Society, the American Physical Society and the American Association for the Advancement of Science, and a member of the Materials Research Society and the Electrochemical Society.

Dr. Norton conducted his undergraduate and graduate studies within the Department of Electrical and Computer Engineering at Louisiana State University, receiving his doctorate in 1989.

Dr. Sesha Srinivasan
Dr. Sesha Srinivasan is currently an Assistant Professor of Physics, at Florida Polytechnic University, Florida, USA. Before moving to FPU in 2014, he was a Tenure Track Assistant Professor of Physics, at Tuskegee University, Alabama, USA. Dr. Srinivasan has more than a decade of research experience in the interdisciplinary areas of Solid State and Condensed Matter Physics, Inorganic Chemistry, Chemical and Materials Science Engineering.

His PhD problem focused on the development various rare-earth, transition metals and intermetallic alloys, composites, nanoparticles and complex hydrides for reversible hydrogen storage applications. Dr. Srinivasan and his Ph.D advisor, Professor O.N. Srivastava (BHU, Varanasi), have successfully converted a 4-

stroke, 100 cc Honda motorcycle to run on Hydrogen gas, which was delivered from the on-board metal hydride canister. After his PhD completion, Dr. Srinivasan joined the research team of Professor Craig Jensen as a Post-Doctoral Fellow in the Department of (Inorganic) Chemistry, University of Hawaii, Honolulu, Hawaii, USA. He and his Post-Doctoral advisor has extensively collaborated with Scientists around the world for the hydrogen storage on light weight complex hydrides which were funded by the US Department of Energy (DOE) and WE-NET, Japan.

After two years at University of Hawaii, he has joined as a Research Scientist, Clean Energy Research Center (CERC) at University of South Florida under the leaderships of Professor Elias Stefanakos and Professor Yogi Goswami. He has established state-of-the-art research laboratory at the CERC and supervised several graduate and undergraduate students for their Masters and PhD dissertations. He has also served as an Associate Director of Florida Energy Systems Consortium (FESC) at USF to co-ordinate number of research projects on clean energy and environment, which was funded by the State Energy Office Florida ($9M grant).

In his current and previous positions at TU and FPU, Dr. Srinivasan was awarded many research grants, worth of $1M from both federal (DOE, NSF, ONR) and private (BP-Oil Spill, QuantumSphere Inc.) funding sources. He has recently awarded with two US patents on Hydrogen storage nano-materials' development and methodologies. He published six book chapters and review articles, more than 65 journal publications and many more peer-reviewed conference proceedings. Dr. Srinivasan has served as a reviewer in the panel review committee of the National Science Foundation (NSF), SMART and NDSEG panels of ASEE, ad-hoc merit review committee of US Department of Energy and panelist for Qatar National Research Fund (QNRF). Dr. Srinivasan currently serves as an Associate Editor of deGruyter Open Book publications in Physics, Materials Science and Astronomy and Guest Editor for the special issue in Journal of Nanomaterials, Hindawi Publications. He is currently on the Editorial board of SciKnow journal publications and Datasets International Journal on Materials Science. Dr. Srinivasan was a guest speaker on "Green Energy" at the 95th

Plenary Speakers

***Garrett Nilsen is the program manager** for the Technology to Market team of US Department of Energy (Sunshot Initiatives), having spent the previous five years serving as a technology advisor for the team. He works with businesses of all sizes focusing on the development of innovative products and manufacturing technologies to help drive down costs and increase the deployment of solar energy.*

Prior to joining SunShot, Garrett was in graduate school in Sweden and Germany. Prior to that, he worked for Technologies

Solutions and Invention, a small business in Connecticut that was an awardee on government contracts to develop optics-based devices for various government customers. Garrett has a B.S. in physics from Union College (NY) and an M.S. in solar energy engineering from Dalarna University in Sweden.

Kelley Smith Burk serves as the Director *for the Florida Department of Agriculture and Consumer Services' Office of Energy. The office is responsible for the development of energy policy and programs for the state as well as promoting the use of renewable energy and energy efficient technologies. Mrs. Burk's responsibilities include supervision and oversight of policy development, program and grant design, and legislative tracking.*

Prior to her work with the Office of Energy, Mrs. Burk worked with the Florida Department of Environmental Protection's Office of Strategic Projects and Planning. In this role, Mrs. Burk staffed the Governor's Action Team on Energy and Climate Change, providing a range of services including managing the transportation and land use technical working group, developing reports and helping draft the Team's Phase I and Phase II reports. Mrs. Burk holds a Bachelor of Arts degree in History from Florida State University and a Master's degree in Public Policy from Pepperdine University.

Keynote Speakers

Thomas L. "Tom" Hernandez is senior vice president*of Business Strategy and Renewables for Tampa Electric. He has primary responsibility for developing and securing approval of the strategic growth plan for Florida Operations and developing clean and sustainable renewable energy technologies that will be transformative and affordable for the company's nearly 730,000 customers.*
Previously, Hernandez was vice president of Energy Supply, vice president of Energy Delivery and Customer Services and vice president of Regulatory Affairs. He joined Tampa Electric in August 1982 as an associate engineer in the Production Department. During his career with the company, he has held a variety of positions in operations, engineering, planning, marketing, fuels and environmental.

Hernandez received his Bachelor of Science degree in chemical engineering from Louisiana State University. He is a member of the American Institute of Chemical Engineers. Hernandez serves on the board of The Florida Aquarium. He previously served eight years on the Children's Board of Hillsborough County, including as chair and treasurer. He is a past executive board member and chair of the Resource Working Group of the Florida Electric Power Coordination Group.

***GabrielAlsenas serves as a General Manager** at Florida Atlantic University's (FAU) Southeast National Marine Renewable Energy Center (SNMREC). Established as one of three U.S. Marine renewable energy centers in 2010. SNMERC seeks to advance the recovery of utility-scale energy from the Ocean's renewable resources with special emphasis on those resources available to the Southeastern US: ocean currents and thermal gradients. The Center works with industry, academia, and government to provide test infrastructure, in situ measurements, and other key enablers.*

Prior to joining the Center in 2007, Mr. Alsenas worked as a graduate student engineer for the Department of Ocean Engineering at FAU, focused on US Navy future projects, prototypes, and sensor systems. Mr. Alsenas completed his B.S. and M.S. degrees in Ocean and Systems Engineering at FAU after a five year sabbatical from The Ohio State University to found an international internet consulting business.
Mr. Alsenas is an advanced AAUS scientific diver and voting member of FAU's Diving and Boating Safety Committee. He is the Convener of IEC/ISO's TC-114 Ad Hoc Group 4 (tidal power performance) technical standards development project team, Chief US delegate for the IECRE certification and conformity Marine Energy Operating Management Committee, Treasurer of the US National Committee for IEC's Renewable Energy Conformity Assessment, and a judge at FIRST Robotics FRC Competitions.

***Dr. Subrata Bandyophadyay (Bandy) currently serves as a Senior Manager** in the EHS group of Mosaic, and is responsible for regulatory compliance and monitoring of all Phosphate Operations, which include several mines and fertilizer manufacturing facilities in Central Florida. Previously Dr. Bandy held corporate positions at Mosaic as Water Strategy Manager, and was involved in developing long term strategies for water resources for all operations within the U.S. He has a Doctor of Science in Environmental Engineering from Tulane University in New Orleans, an MBA from University of South Florida, Tampa, and a Bachelor of Civil Engineering degree from India. Dr. Bandy is a registered professional engineer in Florida and Louisiana. He has been a Tampa resident since 1998.*

Previously Dr. Bandy served as a Vice President at HDR Engineering, a large consulting company and let hundreds of professionals in the southeast. His consulting experience includes management of multimillion dollar projects involving diverse areas of civil and environmental engineering. Dr. Bandy has served as technical expert in several large scale water resources projects including watershed management plans, stormwater master plans, water quality studies, natural systems restoration, and environmental impact analysis.

Dr. Bandy's research work involves bioremediation of hazardous wastes, and "fate and transport" of selected contaminants in the waste stream. He has authored several publications and co-authored book chapters in different areas of environmental engineering and science.

Invited Speakers

- Brett Bailey –President and CEO, IVHCO, Fort Myers, FL
- Charles Withers Jr – Senior Research Analyst, Buildings, FL Solar Energy Center
- David Bruderly – Visionary Entrepreneur, Bruderly Engineering Associates Inc, Jacksonville, FL
- David Keys, CEP – Owner, Enviro-Limit, Tarpon Springs, FL
- Donald Rockwood –Emeritus Professor, University of Florida
- Eric Martin- Director of Building Research, Florida Solar Energy Research Center
- Fredy Altpeter- Professor of Molecular Genetics and Biotechnology, University of Florida
- Ian Small- Assistant Professor of Plant Pathology, University of Florida
- Jason M. Mickel- Manager, Water Supply Section, Southwest Florida Water Management District (SWFMUD)
- Jaspreet Dhau- Assistant Professor of Chemistry, Florida Polytechnic University
- John Kuhn- Associate Professor, Department of Chemical and Biomedical Engineering, University of South Florida
- Juan Ordonez- Professor of Mechanical Engineering, Florida State University
- Laura Belicka – Senior Scientist, Algenol Biotech, Fort Myers, FL
- Manny Garcia – President, Carrollwood Pools Inc., FL
- Melba Horton- Assistant Professor of Biology, Florida Polytechnic University
- Mike Aller –Executive Director & CEO, Energy Florida
- Muhammad Rashid – Professor, Florida Polytechnic University
- Niroumand Hamed – Post Doctoral Fellow, University of Florida
- Nicoleta Sorloica-Hickman – Associate Professor, Florida Polytechnic University
- Paul Brooker- Assistant Research Professor, Florida Solar Energy Center (FSEC)
- Ramona Madhosingh-Hector – Urban Sustainability Agent, UF/IFAS Extension, Pinellas, FL
- Richard Blair –Professor, Department of Physics, University of Central Florida
- Richard Feiock – Professor and Director, Local Governance Lab, FL State University
- Rick Meeker – President / Principal Engineer, Nhu Energy Inc., FL
- Ron Chance – Executive VP, Head of Engineering, Algenol Biofuels Inc., FL

- Ryan Integlia – Assistant Professor of Electrical Eng, Florida polytechnic University
- Scott Wallen –Florida Polytechnic University, Lakeland, FL
- Sesha Srinivasan- Assistant Professor of Physics, Florida Polytechnic University
- Steven Wall – President, Pure Algae Growth Systems, FL
- Timothy Franta – Director of Special Projects, Energy Florida
- Wilfred Vermerris- Professor of Microbiology and Cell Science, University of Florida
- William Eggers- Vice President of Science and Technology, AquaFiber Tech. Corp., FL
- Yogi Goswami- Professor and Director of Clean Energy Research Center, University of South Florida
- Zhihua Qu- Professor and Director of FEEDER Center, University of Central Florida
- Zin Ngwe- Solar Technologies Research, Florida Solar Energy Research