

"Sigma Xi is an international, multidisciplinary research society whose programs and activities promote the health of the scientific enterprise and honor scientific achievement. There are nearly 60,000 Sigma Xi members in more than 100 countries around the world. Sigma Xi chapters, more than 500 in all, can be found at colleges and universities, industrial research centers and government laboratories. The Society endeavors to encourage support of original work across the spectrum of science and technology and to promote an appreciation within society at large for the role research has played in human progress." Over 200 Nobel Prize winners have been members in Sigma Xi. Sigma Xi encourages original investigation in science and engineering and fosters companionship and cooperation among researchers to maintain honor and integrity in all scientific activities.

SIGMA XI

LECTURE SERIES

FORUM ON THE FUTURE OF RENEWABLE ENERGY & HOLIDAY SOCIAL

DECEMBER 1, 2010 DAUER HALL KEENE FACULTY CENTER UNIVERSITY of FLORIDA 5:00-7:00 p.m.



Forum on the Future of Renewable Energy & Holiday Social

MODERATOR

Dr. Leslie Paul Thiele is a Professor in Political Science and Faculty Advisor for the Minor in Sustainability Studies.

SIGMA XI UF CHAPTER 2010/2011 OFFICERS

Dr. Maureen Keller-Wood, *President* Dr. Margaret Fields, *President Elect* Dr. Reba Bandyopadhyay, *Secretary* Dr. Robert DeSerio, *Treasurer*

PANELISTS

Dr. Wilfred Vermerris, Associate Professor in Agronomy, is a member of the University of Florida Genetics Institute and the Plant Molecular and Cellular Biology Graduate Program. He has an adjunct appointment in the Laboratory of Renewable Resources Engineering at Purdue University. He is the editor of the book *Genetic Improvement of Bioenergy Crops*, and co-editor in chief of the new journal *Bioenergy Research*.

Dr. Vermerris will speak on "Genomics to the rescue! Breaking the 30-year bioenergy cycle in the face of political obstacles". Since the 1920's attempts to develop large-scale bioenergy production have gained and lost popularity in cycles of approximately 30 years: World Wars I and II, the 1970's oil crisis, and today. I will highlight the potential of recent advances in genetics and genomics of microbes and plants to develop fuels and biobased products that have the potential to make bioenergy become a reality this time around.

Dr. Tim Anderson, Distinguished Professor in Chemical Engineering and Director of the Florida Energy Systems Consortium, has also served his college as Associate Dean for Research. In addition to his many research projects, he is participating in collaboration with the Electrical and Materials Sciences departments on research to reduce the costs of manufacturing photovoltaic solar cells based on thin film technology.

Dr. Anderson will present an overview of the Florida Energy Systems Consortium that was established by statue in 2008 to conduct research, education, outreach, and technology transfer to contribute to a secure energy future for Florida. An overview of opportunities in the state will be presented that includes solar, bio, ocean, and wind energy as well as energy storage and transmission.c

Rob Klemans, an engineer at GRU's Strategic Utility Planning Division, will discuss the utility's effort to bring renewable energy to Gainesville and how solar and biomass energy projects will improve reliability, add fuel diversity and provide long-term cost savings and economic benefits for customers.