



Innovative Manure Treatment Technologies Being Demonstrated Through the SBIR Program

December 14, 2007

2:30 pm (eastern), 1:30 pm (central), 12:30 pm (mountain), 11:30 am (pacific)

NOTE: The date of this webcast has changed from previous announcements!

Richard Hegg, USDA CSREES, Tom Herlihy, RT Solutions, Mike Serio, Advanced Fuel Research

The USDA Small Business Innovation Research Program (SBIR) is a competitive grant program focused on helping small businesses develop new technologies or practices that will become commercially viable. This webcast will introduce the animal manure management focus area and some of the previously funded projects. Two current participants with Phase II grants will describe their technologies. RT Solutions operates North America's largest earthworm composting facility. The facility has been integrated into an existing 1,000 head dairy in Avon, New York and is currently conducting research on the benefits of their vermicompost products. While anaerobic digestion and direct combustion have often been considered for processing animal manure, pyrolysis offers higher throughput (relative to digestion) and reduced NOx emissions (relative to combustion). Advanced Fuel Research demonstrated the potential to produce medium BTU fuel gases from poultry litter. Their Phase II work was directed at designing, constructing and testing a 1 kg/hour continuous pyrolyzer/combustor unit.



Dr. Richard Hegg is the USDA CSREES National Program Leader in agricultural engineering and Program Manager for the SBIR animal manure management focus area. He received his Ph.D. from the University of Minnesota and has worked with the USDA Ag Research Service (ARS), and Clemson University as a faculty member and department head. He joined CSREES in 1998.

Tom Herlihy is the President of RT Solutions, Inc. and has over 20 years experience in design, permitting and operation of organic waste management projects, including 18 years as a consulting engineer. He holds an M.S. in Agricultural and Biological Engineering. He has a patent (in review) on his process controlled production system.



Dr. Mike Serio is President of Advanced Fuel Research, Inc. He received a Ph.D. in chemical engineering from the Massachusetts Institute of Technology. He is currently a member of the SBIR Advisory Committee for the Connecticut Center for Advanced Technology, the Industrial Advisory committee for the University of Connecticut Department of Chemical Engineering, the editorial board of the journal, *Fuel*, and is the Head Trustee for the American Chemical Society, Division of Fuel Chemistry.

Resources and Links:

--SBIR Manure Management <http://www.csrees.usda.gov/fo/animalmanuremanagementsbir.cfm>

--RT Solutions <http://www.wormpower.net>

--Advanced Fuel Research <http://www.afrinc.com/>

How do I participate?

Information about software requirements, testing your connection, and how to connect to the webcast are available at <http://lpe.unl.edu/webcast5.html>.

The LPE Learning Center is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animal systems should have on-demand access to the nation's best science-based resources. More information is available at <http://lpe.unl.edu>.