Separation Technologies for Capturing Nutrients from Manure

January 18, 2019

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

Exporting phosphorus and possibly nitrogen from larger livestock operations as well as regions of large livestock populations is often essential for protecting water quality. Solids (and nutrient) separation technologies are an option for concentrating nutrients for export. This webinar will introduce three approaches to solids separation that are being applied in commercial settings:

- The Mobile Struvite Project: Phosphorus cycling between the dairy and alfalfa industries
- Newtrient Case Studies of Commercial Multi-stage Separation Systems
- GeoTextile Bag and Polymer System for Novel Plant Nutrient Products

Our three experts will introduce field experiences and case studies to help us understand the strengths and potential application of each of these promising separation systems. An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.

**Dr. Joe Harrison** is a faculty member of the Department of Animal Sciences at Washington State University and has been conducting research and demonstration projects related to livestock nutrient management, including feeding management. His projects include: fate and transport of bacteria from anaerobically digested manure (including the impact on surface water quality), utilization of nutrients in AD effluent for production of grass forage, production of a phosphorus based fertilizer (struvite) from anaerobically digested manure, development of an economic decision aid tool for predicting the financial risks associated with community based ADs that utilize pre-consumer food-wastes, effect of AD on odor and gaseous emissions, reduction in nitrogen import to dairy farms in feeds by precision ration balancing, extraction of phosphorus from liquid dairy manure for off farm use as a fertilizer, relationship of manure application to groundwater nitrate content, and potassium nutrition of the early lactation dairy cow. Phone: (253) 445-4638; Email: jhharrison@wsu.edu

**Mark Stoermann** is the Chief Operating Officer for Newtrient, an organization serving as a catalyst for advancing application of manure management technologies, practices, products and markets. Mark previously served as Chief Operating Officer for STAR BioEnergy LLC, the anaerobic digestion division of STAR Energy LLC. He has also served as Project Manager for Fair Oaks Dairy Farms and Select Milk Producers with responsibility for the construction of three anaerobic digesters for dairy manure. Phone: (219) 712-3511; Email: Mark.S@newtrient.com

**Jeff Porter** is the National Animal Manure and Nutrient Management Team Leader located at the East National Technology Support Center in Greensboro, NC. His main responsibilities include reviewing and evaluating innovative technologies in manure management, working with states to assist in the transfer of these technologies to help carry out the NRCS mission. Jeff grew up on a small farm in southern Indiana. He earned his Bachelor’s and Master’s degrees from Purdue University in Agricultural Engineering. Phone: (336) 370-3342; Email: Jeffrey.porter@gnb.usda.gov

**How Do I Participate?**

On the day of the webinar, go to [www.extension.org/58813](http://www.extension.org/58813) to download the speaker’s power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: [www.extension.org/8924](http://www.extension.org/8924).

**For More Information**

- Newtrient Technology Catalog [http://www.newtrient.com/Catalog/Technology-Catalog](http://www.newtrient.com/Catalog/Technology-Catalog)

The LPE Learning Community 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. See our website at: [lpelc.org](http://lpelc.org).