

MORE Science at UTSA

Environment Science and Engineering

Spring 2007 Seminar Series

Where: BSE room 2.01.02

When: 4:00 PM – 5:00 PM on February 16, 2007

Snack and drinks will be served

Speaker: Dr. Ariel Szogi



Dr. Ariel Szogi is currently a Research Scientist at the USDA-ARS Coastal Plains Research Center, Florence, SC. He received his Agronomy degree from the University of the Republic, Uruguay, M.S. in Soil Sciences from Wageningen University, The Netherlands in 1987, and Ph.D. in Soil Sciences from Louisiana State University in 1992. From 1993 to 1999, he worked with USDA-ARS on waste treatment technologies for hog farms. From, 1999 to 2001 he was Extension Faculty with Washington State University. His work with WSU was focused on soil conservation and water quality improvement in irrigated agriculture. In 2001, Dr. Szogi returned to USDA-ARS Florence to continue his research career within the ARS Manure and Byproduct Utilization National Program. His areas of specialization include soil chemistry, water chemistry, and manure management.

Topic: Development of Technology for Recovery of Phosphorus from Animal Manure

In agricultural systems, manure land application should be managed to maintain a productive soil while minimizing the potential for phosphorus (P) soil losses and pollution of surface waters. A treatment system technology was developed for recovery of soluble P from liquid pig manure in calcium phosphate form as an alternative manure management method when land application of manure is not an option. Soluble P is recovered as a P precipitate by increasing the pH of wastewater with controlled amounts of hydrated lime after manure solids removal and biological N treatment steps. This innovative technology for the recovery of phosphates from liquid pig manure is useful for solving distribution problems of excess manure P in soils, and it allows significant amounts of this nutrient to be transported off the farm in concentrated form suitable for plant fertilizer use.