Speciation of Phosphorus in Alum-Amended Poultry Litter using XANES Spectroscopy.

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Phosphorus contamination of the Chesapeake Bay watershed is a huge environmental problem. Since long-term application of poultry manure to agricultural land is one of the primary sources of excessive P levels in Delaware, efforts have been made to reduce the mobility of P in poultry litter by adding chemical amendments such as alum. This paper will present results from *in situ* XANES spectroscopy investigating the effect that alum amendments have on the chemical form of P in poultry litter. The effect of alum application rates and time of reaction will be discussed.

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