NRESi

"Our environment is our future"

Friday March 25, 2011

3:30 - 4:30 pm

Lecture **Theatre** 7 - 150

RESEARCH COLLOQUIUM SERIES

Mike Rutherford

Associate Professor Environmental Science and Engineering UNBC



Burnt Offerings from the Bioenergy Industry

Bioenergy processes which combust or gasify biomass can create significant quantities of ash residuals. The properties of ash depend on several factors including the nature of the input biomass. What can be done with these ash residuals? Landfilling is common but this approach is not sustainable or environmentally responsible. Do some ash materials enhance soil properties? If so, are there any risks associated with this approach? Biochar is a charcoal-based material specifically produced for environmental applications, such as for use as a soil amendment. The list of purported benefits of biochar usage in soils is long, but are these claims justified when biochar is used in Canadian soils? Are there any environmental risks associated with biochar usage? This talk will summarize some of the research activities conducted at UNBC that are exploring the utilization of ash and biochar materials as soil amendments.