



# ses

school of environmental sciences

The Research Seminar Presentation by

**Enoch Ofosu**

will be held on

**Tuesday March, 27 2018**

**At 1:30 pm**

**ALEXANDER HALL 265**

**Title: Carbon sequestration and Greenhouse gas emissions as influenced by diverse Riparian buffer systems in Southern Ontario**

### Abstract

The role of Riparian Buffer Systems (RBS) in sequestering Carbon (C) in their soils and biomass is increasingly being realized. The contribution of RBS towards reduction of soil erosion, prevention of nutrient loading and mitigation of non-point source pollution are well studied in the last few decades. There is however, a divergent view concerning ecosystem services and disservices in relation to greenhouse gas (GHG) emissions. C sequestration potentials by varied buffers types (rehabilitated buffer(RB), grass buffer (GB), undisturbed natural forest (UNF) and adjacent agricultural fields (AG)) are not adequately studied. It is therefore the aim of this research to study C sequestration and GHG emissions as influenced by diverse RBS. Annual C sequestration values with annual GHG emissions will be compared among the diverse RBS and the AGs in order to verify if these systems contribute to positive C sequestration and act as a C 'sink' or contribute to negative C sequestration and act as GHG 'source' in agricultural ecosystem. The results of this study will help in the adoption of RBS in agricultural landscapes and guide the cause of new policies.

**Everyone is welcome to attend**

**(This is a Research Proposal presentation by students in ENV5\*6900)**