

Abstract of Presentation

Presentation Title:

Problem of low-cost ammonium removal in drinking and waste waters in Vietnam

Abstract:

In Vietnam, there is a lot of wastewaters containing high level of ammonium, such as landfill leachate, sea-products, rubber latex processing wastewaters, and even groundwater used for drinking purpose. Usually, water technologists prefer to apply common biological nitrification-denitrification process, but in these cases this process requires a lot of energy for nitrification. The alternatives may be either new anammox process, or conventional anaerobic treatment followed by algae or other aquatic plants growth with subsequent appropriate biomass utilization. In the last case we can get triple target: (1) purification of water, (2) nutrient recovery, and (3) mitigation of green house gases via CO₂ sequestration, CH₄ utilization and energy saving. This report presents some results in the role of anammox process in ammonium removal from groundwater and feasibility of combined technology in treatment of rubber latex processing wastewater.