## Partial Nitration/Anammox System Control Strategies

Alam Nawaz, Nikita Saxena, 윤대희, Junaid Haider, 이문용<sup>†</sup> 영남대학교 (mylee@ynu.ac.kr<sup>†</sup>)

The study emphasizes on the control strategies developed with Partial nitration (PN) and Anaerobic Ammonium Oxidation (AnAmmOx) process for the municipal wastewater treatment plant. The main objective of this study is to improve the nitrogen-removal efficiency (NRE). In this study, the step-in-aid of the execution of nine different control strategies has been explained and inspected with the help of block diagram/flowchart. Each one of the control strategies have also point out with benefits. The nitrogen removal through biological process needs appropriate bonding between the manipulated variable (MV) and control variable (CV). This approach to be followed has been also talk about when deciding the bonding criterion and selection of appropriate candidates. Notwithstanding, the implementation of conventional feedback-feedforward control logic is easy, incorporation of the non-linearity and complexity associated with biological processes requires design of advanced control systems.