

Overview on application of Response Surface Methodology (RSM) in treatment of Palm Oil Mill Effluent (POME)

ABSTRACT

There are many factors affecting the performance of a treatment system especially in the treatment of palm oil mill effluent (POME) as its contains high amounts of suspended solid, low pH, high salt content and high chemical oxygen demand (COD). However, one factor at a time approach is complicated method in establishing relationship between multiple parameters. Response surface methodology (RSM) is a recommended approach as it is widely used to analyze and study the interactions between multiple parameters and provides optimum output as well as minimizing the defects which result in good treatment system. This paper overviews the recent and current research in the application of RSM in optimizing the treatment development of POME.

Keyword: Palm oil mill effluent (POME); Multiple parameters; Response surface methodology (RSM)