

### Performance of Hybrid Process with Coagulation and Membrane Treatment for Secondary Domestic Wastewater Reuse

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The performance of hybrid process consisting of coagulation and membrane treatment was evaluated for secondary domestic wastewater reuse. The determined optimal coagulation condition was 0.75 g l<sup>-1</sup> coagulant dose and pH 6. The objective of this hybrid process was to identify the optimum method of combining coagulation with microfiltration membrane system. The process of combination of coagulation treatment with membrane, involves two different methods. Firstly, coagulation was introduced as a pretreatment for membrane operation. Secondly, coagulation was integrated with membrane treatment as a in-line process. The performances were compared in terms of flux decline and removal efficiency. Result showed that the former was more efficient as well as essential for the prevention of flux decline than the latter. The removal efficiency was about 70%. It was found that coagulation-membrane hybrid process was suitable for secondary domestic wastewater reuse.