## NATURAL ORGANIC MATTER (NOM) FOULING AND ASSOCIATED FOULANT IN SURFACE WATER TREATMENT

A.W. Zularisam<sup>1</sup>, A.F. Ismait<sup>2\*</sup>, M.R. Salim<sup>3</sup>, Mimi Sakinah<sup>2</sup>

<sup>1</sup>Faculty of Civil and Environmental Engineering, Universiti Malaysia Pahang, Gambang, Pahang,

<sup>2</sup>Membrane Research Unit, Universiti Teknologi Malaysia, Skudai Johor, Malaysia

<sup>3</sup>Faculty of Civil Engineering, Universiti Teknologi of Malaysia, Skudai Johor, Malaysia

\*Corresponding author. Email: afauzi@utm.my

## **ABSTRACT**

Application of membrane in surface water treatment for drinking water purpose is normally governed by fouling issue, which significantly restricts its widespread usage. This paper discusses NOM and its components as the major membrane foulants, possible fouling mechanisms and current techniques used to identify foulants associated with NOM fouling. Future potential in membrane application for NOM removal during surface water treatment for drinking water was also discussed.

Keywords: NOM; Fouling mechanism; Membrane filtration; Surface water treatment;