

4<sup>th</sup> International Conference on **Pollution Control & Sustainable Environment**  
&  
6<sup>th</sup> Edition of International Conference on **Water Pollution & Sewage Management**  
July 26-27, 2018 Rome, Italy

**A post treatment method for municipal wastewater treatment by the microalgae: A current review**

Md. Nuralam Hossain<sup>1</sup>, Xiao Lan Zeng<sup>1</sup>, Wen Chuan Ding<sup>1</sup>, Awni Alkhazaleh<sup>2</sup> and Khadiza Jannat<sup>3</sup>

<sup>1</sup>Chongqing University, China

<sup>2</sup>University of Bolton, UK

<sup>3</sup>Mawlana Bhashani Science and Technology University, Bangladesh

Owing to the rapid urbanization and expansion of urban populations, the municipal wastewater has generated in large volume. Wastewater from municipal wastewater treatment plants contains excessive inorganic nutrient such as nitrogen and phosphorus which contribute detrimental eutrophication in natural water bodies. Eutrophication is a severe ecological problem which may lead to long term adverse effects of the natural environment. Therefore, it is necessary to establish a post treatment method for municipal wastewater treatment before being discharged into natural water bodies. Various types of treatment methods have been used for the removal of inorganic nutrient (nitrogen and phosphorus) from municipal wastewater. Microalgae play a vital role in the post treatment of municipal wastewater considering economically viable and environmentally friendly. Treatment of wastewater using microalgae has been studied extensively and gained attention a positive result due to nutrient removal efficiency. The present literature review will provide helpful information the application of potential microalgae in post treatment of municipal wastewater treatment effectively, before discharged into natural water bodies. Future research should address the inorganic nutrient removal performance based on various species of microalgae, nutrient uptake capacity and microalgae culture mechanism.

nuralam.15cqu@hotmail.com