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### ACCEPTED MANUSCRIPT

# Applications of Graphene oxide blended poly (vinylidene fluoride) membranes for the treatment of organic matters and its membrane fouling investigation

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#### Abstract

In this work, poly (vinylidene fluoride) (PVDF) membranes of different graphite oxide (GO) dosage were prepared using phase inversion method. The results indicated that the hydrophilicity, rejection rate, anti-pollution capacities and pure water flux of membranes were efficiently enhanced with the introduction of GO, and the porosity of membrane was increased about 14.3 %, which was attributed to the charge repulsion reaction between the negatively charged of dissolved organic matter and negative functional groups of GO. The raw water from Qinghe sweage

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