

# **Assessment of Disinfection By-Products Removal by Ozonation Coupled with Adsorption**

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摘要.

## **Abstract**

This research work was performed to evaluate ozonation and granular activated carbon adsorption processes from the view-point of controlling the formation of disinfection by products (DBPs). Both the humic acid and raw water were first preozonated and then adsorbed on the activated carbon to assess the potency for removal of total organic carbon (TOC) and DBPs. The disinfection by-product including THMs and HAAs, in principle, can be successfully removed through a use of the ozonation and granular activated carbon (GAC) adsorption processes. However, in practice dealing with the raw water, it is necessary to introduce the pilot-plant to obtain the design and operation guidelines for the water treatment plant through the ICA (Instrumentation Control and Automation) program in our future research work