

- Title:  
Development of Generating Energy-value from Wastewater by Hydrothermal Gasification Process
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- Summary:  
The high concentration or toxic organic waste water difficult to treat by biological treatment is often treated by incineration process at much cost and energy with large amount of carbon dioxide emission. The hydrothermal gasification process and the high activity catalyst for the process were developed by Osaka Gas Co., Ltd. Organic waste water can be treated by the hydrothermal gasification and the useful gas such as methane can be generated efficiently from the waste water with less carbon dioxide emission. The decomposition rate of typical organic compounds in industrial waste water and the composition of the generated gas from the compounds were clarified by the past experiments. Now we started the demonstration test using the newly installed pilot plant in a factory where waste water is discharged. In this study, we confirmed the treatment stability for the actual waste water and collected various engineering data in the demonstration test to establish the design technology of hydrothermal gasification plant in actual capacity.
- Keyword:  
energy recovery, CO2 reduction, gasification, catalyst, waste water