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Hydrothermal conversion of sewage sludge: *focusing on the
characterization of liquid products and their methane yields*

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Abstract

The conversion of Dewatered sewage sludge (DSS) into bio-oil and hydro-char through hydrothermal conversion (HTC) has been well studied, while the treatment of wastewater (HTCWW) was overlooked. The present study aimed to investigate the organic compositions of HTCWW obtained under different temperatures and residence time (170 °C-320 °C, 0.5–6.0 h) and their potentials use for methane production through anaerobic digestion (AD). Results showed that the methane yield achieved to 286 mL CH₄/g COD when HTC temperature was 170 °C while it was decreased to only 136 mL CH₄/g COD at 320 °C. The methane yield of HTCWW was

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