Supplementary Information:

Methane-rich biogas production from waste activated sludge with the addition of ferric chloride under thermophilic anaerobic digestion system

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Fig. A1 The ratio of CO\textsubscript{2}/CH\textsubscript{4} during the digestion process.

Fig. A2 Variations of VFAs (including acetic acid, propionic acid, butyric acid, iso-butyric acid, valeric acid and iso-valeric acid) in the reactors during the anaerobic digestion.

Fig. A3 Energy-dispersive spectrometer (EDS) analysis of the sludge samples after dosing different ferric salts.

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**Fig. A.1**

**Fig. A.2**

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**Fig. A.1**

**Fig. A.2**
Fig. A.3