

Supplementary Materials

# Volatile Fatty Acids (VFA) Production and Recovery from Chicken Manure Using a High-Solid Anaerobic Membrane Bioreactor (AnMBR)

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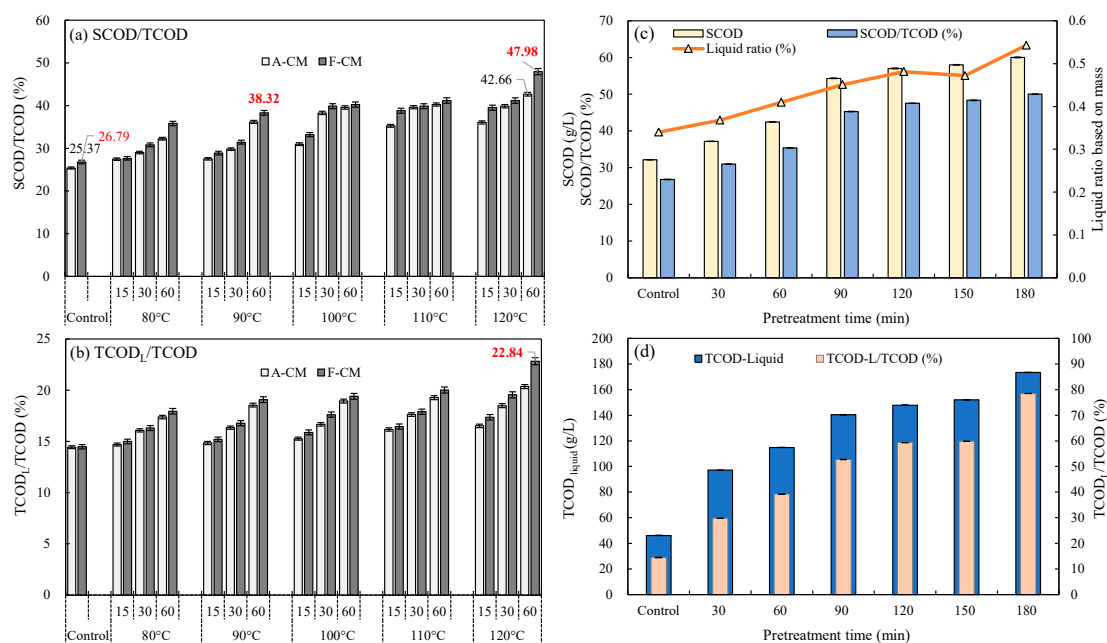
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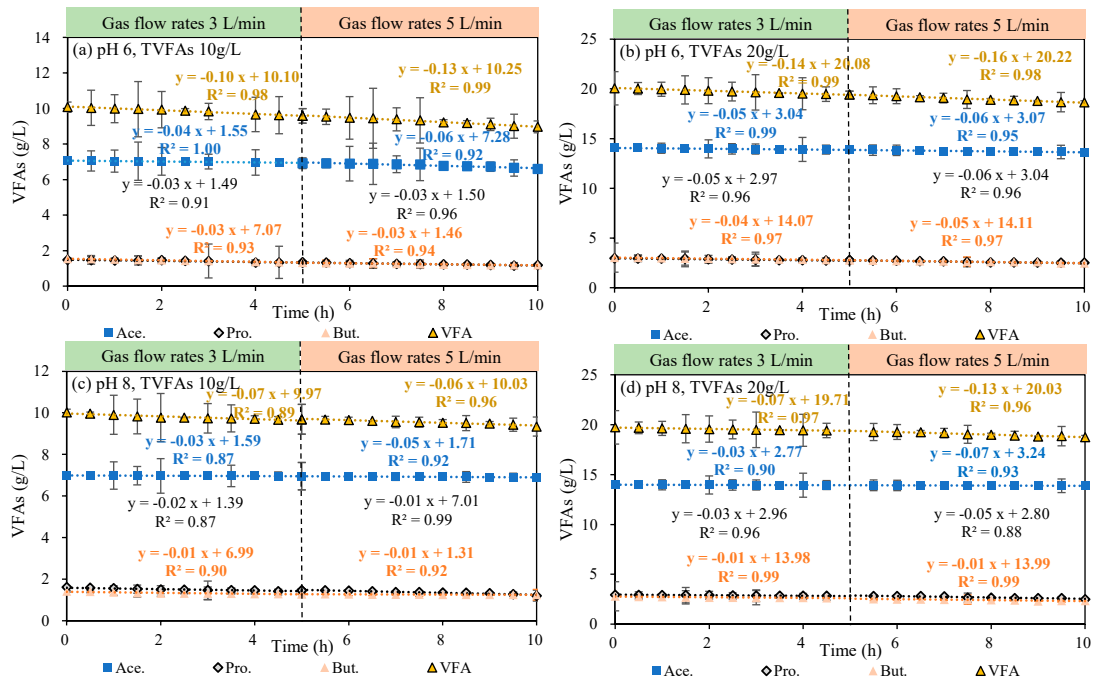
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**Figure S1.** Hydrolysis efficiencies of chicken manure with thermal pretreatment under different temperature and time.



**Figure S2.** VFAs evaporation liner fit for different conditions of pH, N<sub>2</sub> flowing rates and initial VFAs concentration.

**Table S1.** VFAs evaporation test during different conditions of pH, N<sub>2</sub> flowing rates and initial VFAs concentration.

		pH 6.0				pH 8.0			
Gas Flow Rates		3 L/min		5 L/min		3 L/min		5 L/min	
		$k_1$	$R^2$	$k_2$	$R^2$	$k_1$	$R^2$	$k_2$	$R^2$
TVFA 10 g/L	Ace.	-0.04	0.93	-0.06	0.92	-0.03	0.90	-0.05	0.99
	Pro.	-0.03	0.91	-0.03	0.96	-0.02	0.87	-0.01	0.92
	but.	-0.03	1.00	-0.03	0.94	-0.01	0.87	-0.01	0.92
	VFA	-0.10	0.98	-0.13	0.99	-0.07	0.89	-0.06	0.95
TVFA 20 g/L	Ace.	-0.05	0.99	-0.06	0.97	-0.03	0.99	-0.07	0.93
	Pro.	-0.05	0.97	-0.06	0.96	-0.03	0.96	-0.05	0.88
	Ibu.	-0.04	0.96	-0.05	0.95	-0.01	0.90	-0.01	0.99
	VFA	-0.14	0.99	-0.16	0.98	-0.07	0.97	-0.12	0.96

Notes: (1) The total volatile fatty acids (TVFA) consisted of acetate: propionate: butyrate = 7:1.5:1.5;  
 (2)  $k$  means the evaporated coefficient under different conditions, g/(L·h).