

Supporting Information for

Effect of organic matter on CO₂ hydrate phase equilibrium in phyllosilicate suspensions

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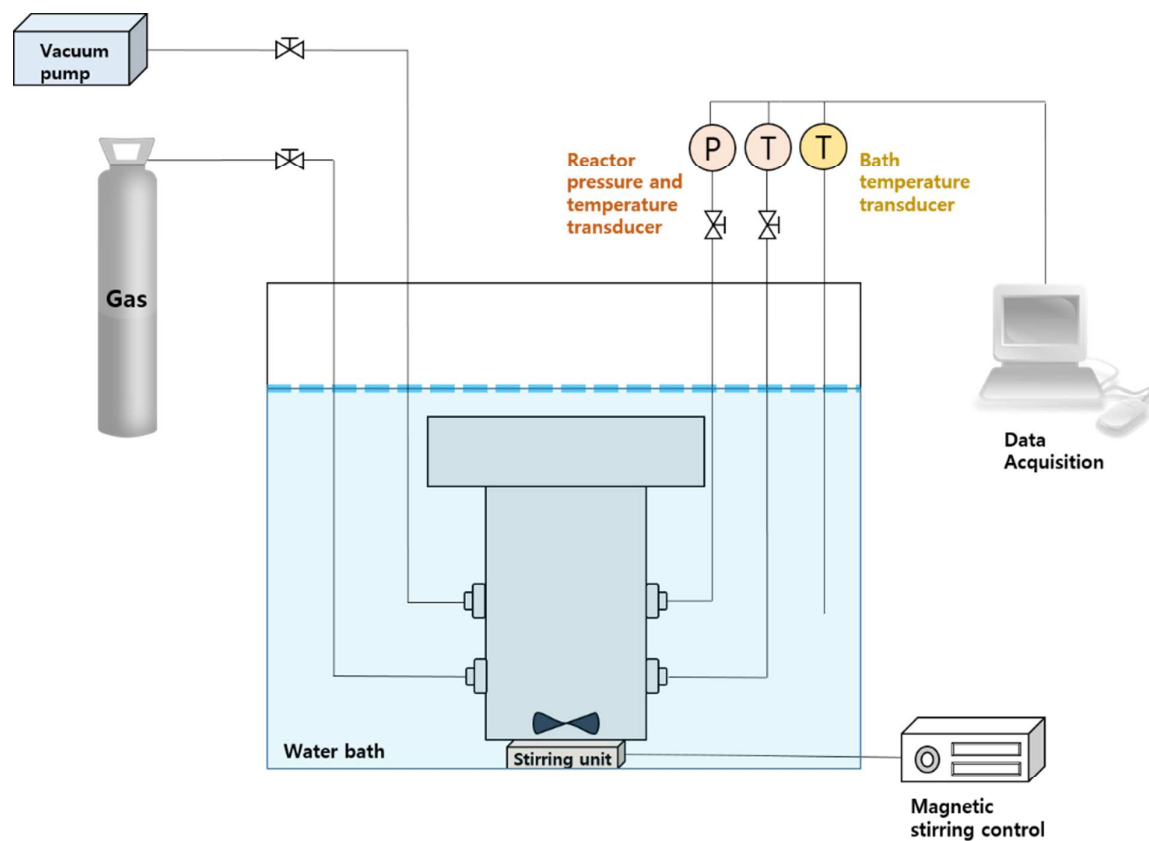


Figure S1. Schematic Diagram of the Experimental System

Table S1. Phase Equilibrium Conditions of CO₂ Hydrate in the Presence of DIW, Organic Matter, and Phyllosilicate Minerals.

T(K)	P(bar)	T(K)	P(bar)	T(K)	P(bar)	T(K)	P(bar)
DIW		DIW + glycine 0.5mol%		DIW + glucose 0.5mol%		DIW + urea 0.5mol%	
274.6	14.65	274.6	15.33	274.6	15.61	274.6	14.92
275.2	15.81	275.2	16.62	275.2	16.82	275.2	16.15
275.8	17.05	275.8	17.82	275.8	18.05	275.8	17.35
276.4	18.27	276.4	19.15	276.4	19.31	276.4	18.71
277.0	19.55	277.0	20.45	277.0	20.72	277.0	20.08
DIW + glycine 1.0mol%		DIW + glucose 1.0mol%		DIW + urea 1.0mol%		DIW + Na-MMT	
274.6	16.00	274.6	16.25	274.6	15.81	274.5	15.25
275.2	17.22	275.2	17.51	275.2	17.02	274.9	15.94
275.8	18.35	275.8	18.70	275.8	18.15	275.3	16.76
276.4	19.71	276.4	20.05	276.4	19.60	275.6	17.35
277.0	21.13	277.0	21.42	277.0	20.91	275.9	17.96
DIW + Na-MMT +glycine 0.5mol%		DIW + Na-MMT +glucose 0.5mol%		DIW + Na-MMT +urea 0.5mol%		DIW + Kaolinite	
274.6	15.03	274.6	14.82	274.6	15.23	274.5	14.50
275.2	16.22	275.2	16.02	275.2	16.33	274.9	15.25
275.8	17.51	275.8	17.33	275.8	17.65	275.3	16.00
276.4	18.72	276.4	18.41	276.4	18.81	275.6	16.66
						275.9	17.30
DIW+ kaolinite +glycine 0.5mol%		DIW + kaolinite +glucose 0.5mol%		DIW + kaolinite +urea 0.5mol%		DIW + illite	
274.6	15.35	274.6	15.63	274.6	14.89	274.5	14.45
275.2	16.64	275.2	16.88	275.2	16.17	274.9	15.23
275.8	17.85	275.8	18.13	275.8	17.38	275.3	16.05
276.4	19.19	276.4	19.35	276.4	18.71	275.6	16.62
						275.9	17.23
DIW + illite +glycine 0.5mol%		DIW + illite +glucose 0.5mol%		DIW + illite +urea 0.5mol%			
274.6	15.38	274.6	15.61	274.6	14.93		
275.2	16.63	275.2	16.83	275.2	16.15		
275.8	17.86	275.8	18.10	275.8	17.41		
276.4	19.21	276.4	19.42	276.4	18.74		