

## SUPPORTING INFORMATION (SI)

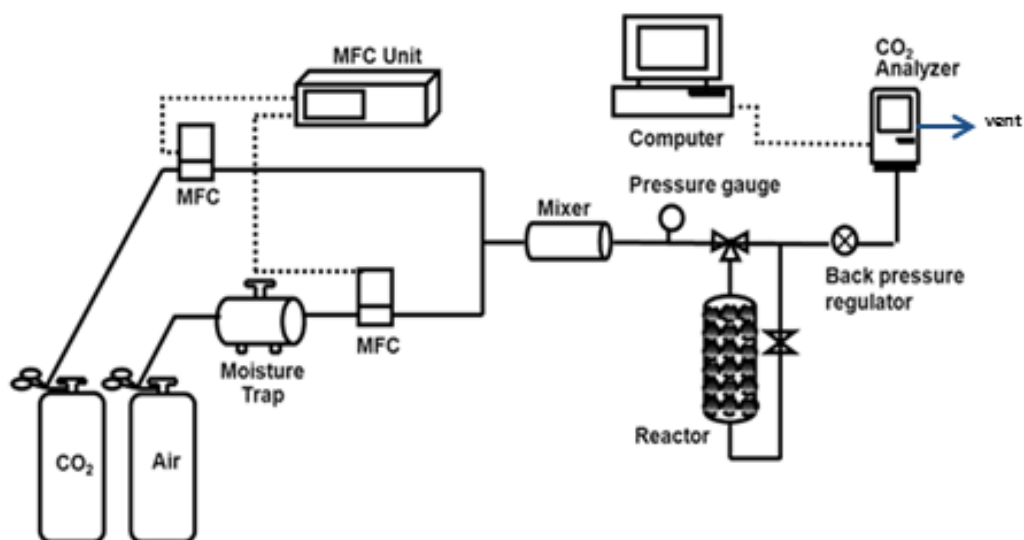


Fig. S1. Low-level CO<sub>2</sub> adsorption set-up.

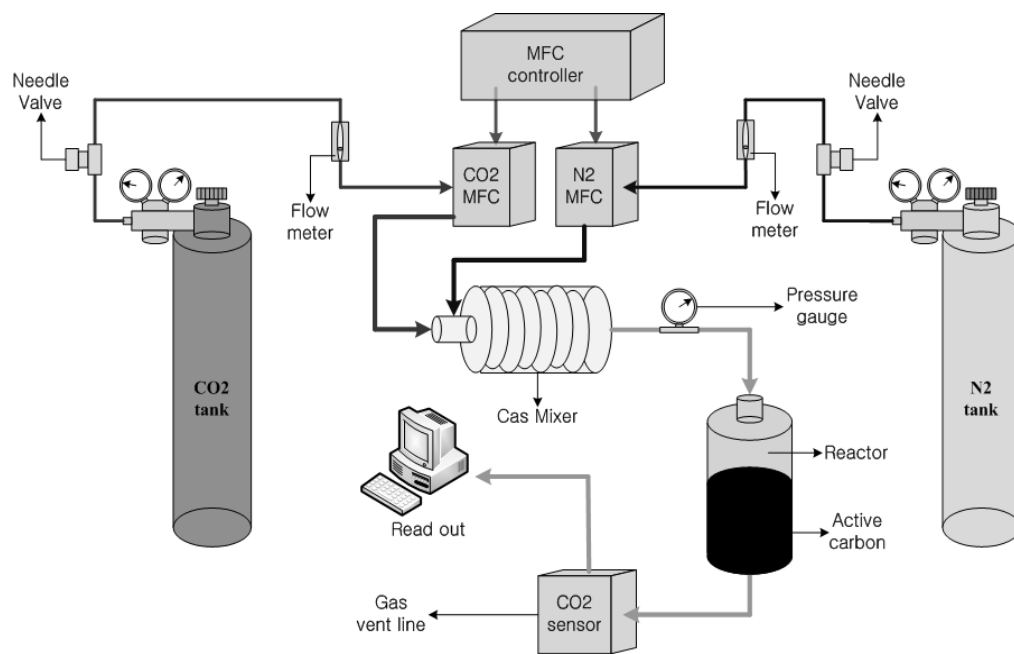
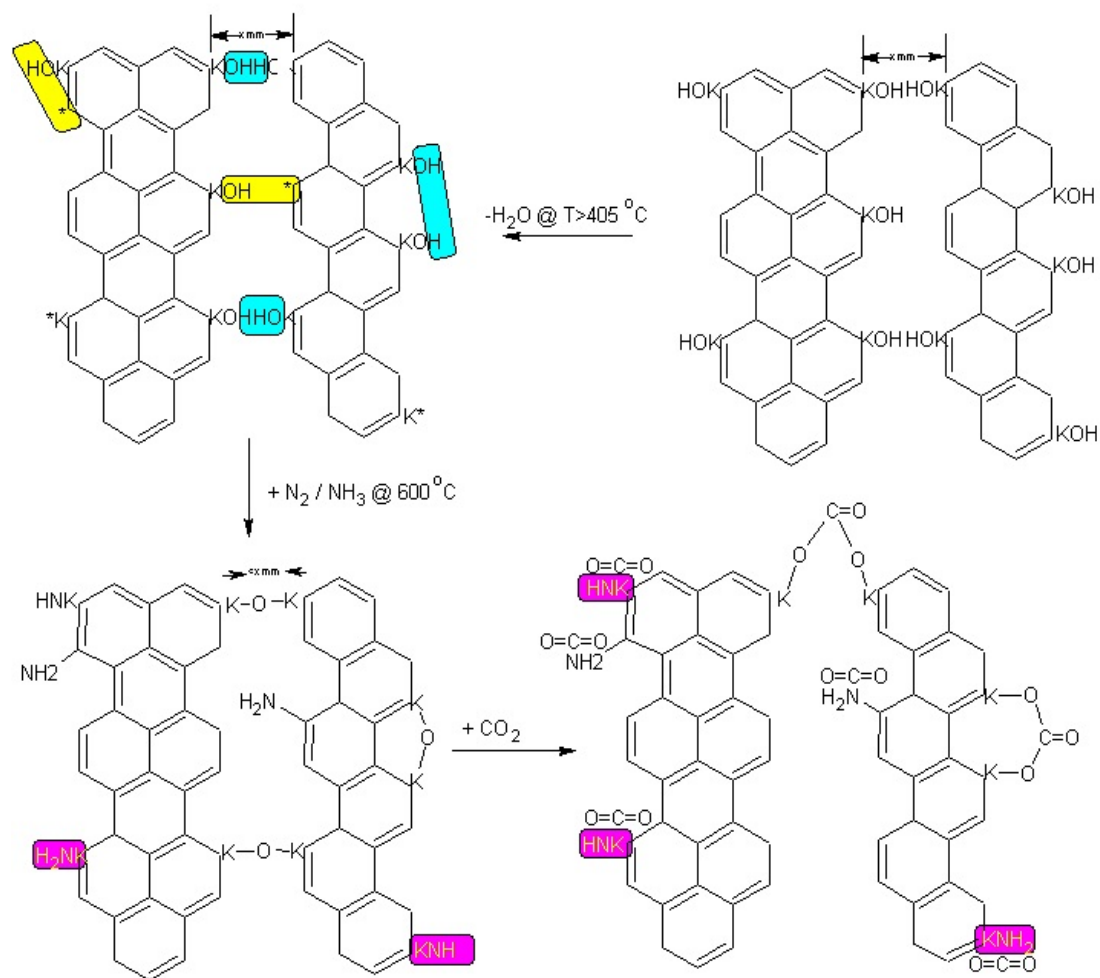
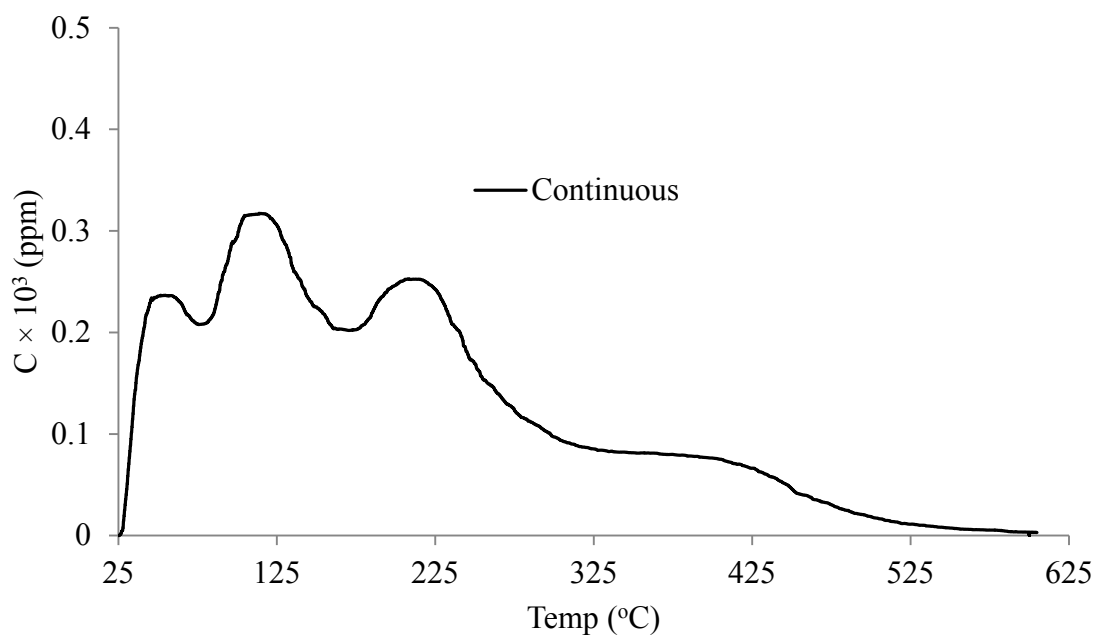


Fig. S2. High-level CO<sub>2</sub> (10%) adsorption set-up.



**Fig. S3.** Hypothetical model for stabilization of K-sites by amination and subsequent chemisorption of  $\text{CO}_2$



**Fig. S4.** The continuous TPD test flow.