

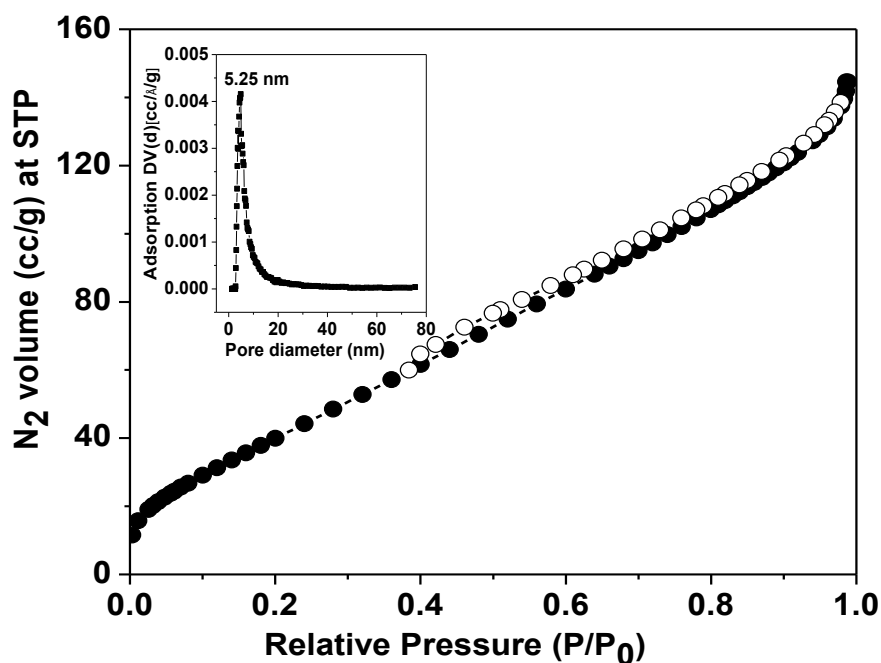
## Supporting Information

Pd-grafted periodic mesoporous organosilica: an efficient heterogeneous catalyst for Hiyama and Sonogashira coupling, and cyanation reactions

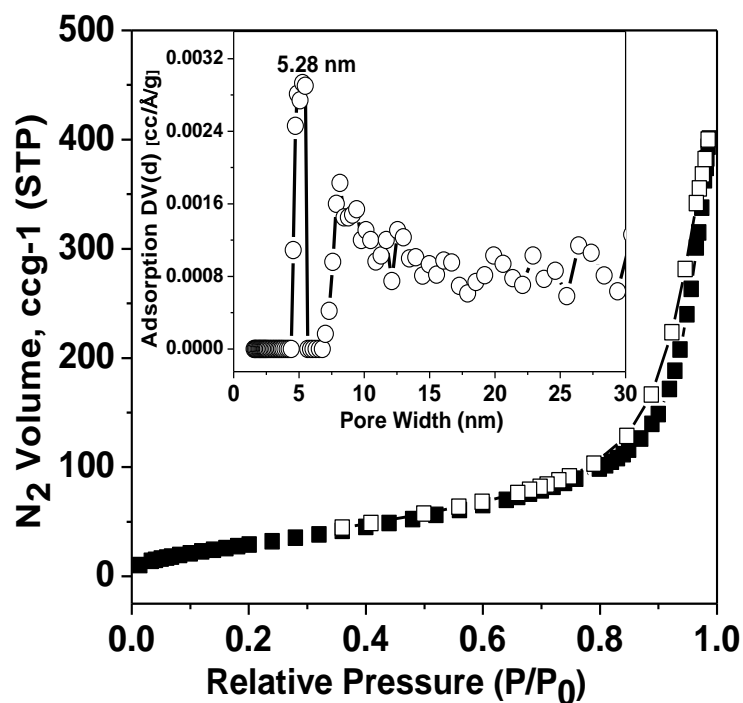
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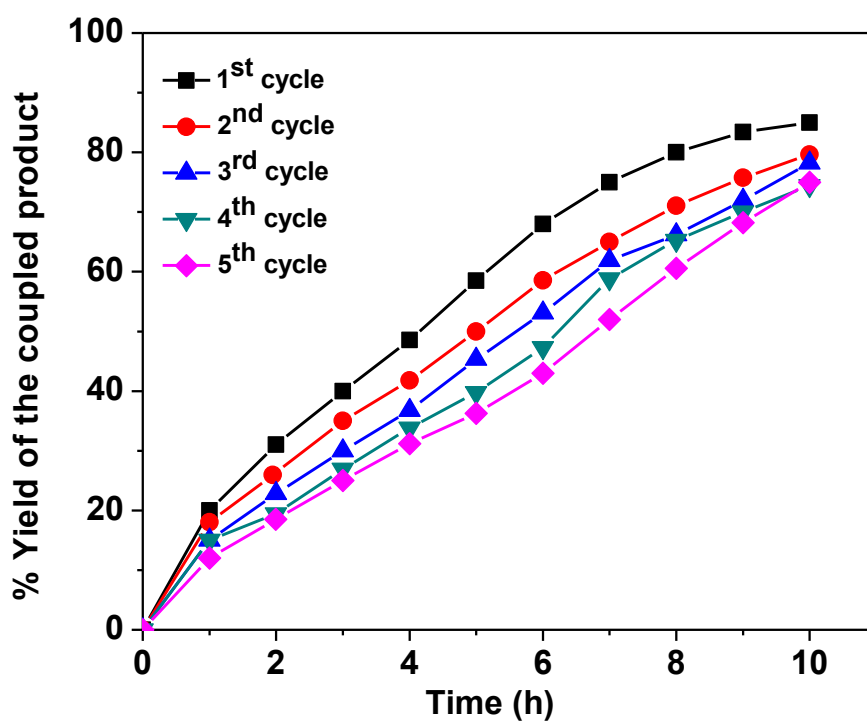


**Figure S1:** N<sub>2</sub> sorption isotherm of Pd-LHMS-3 after second catalytic cycle at 77 K. Adsorption and desorption points are marked by filled and empty circles respectively. Pore size distribution (determined by NLDFT method based on silica cylindrical pore at 77K) is shown in the inset.

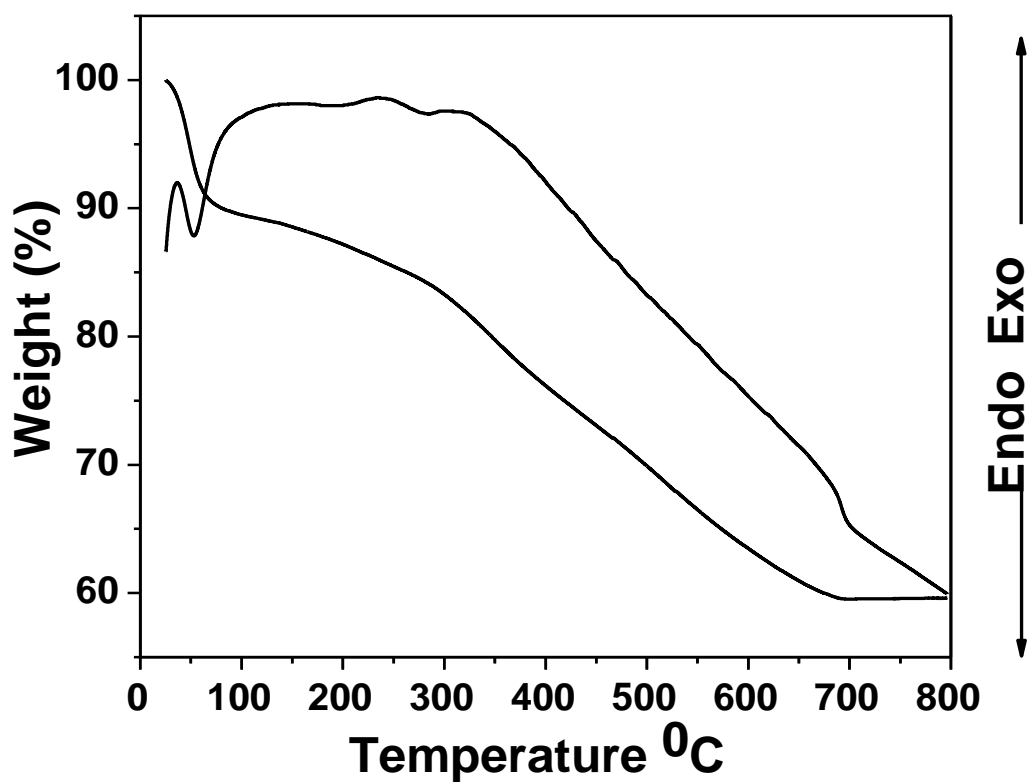


**Figure S2:** N<sub>2</sub> adsorption-desorption isotherm of Pd-LHMS-3 after its fourth catalytic cycle is over. Adsorption points are marked by filled squares and desorption points by empty squares. DFT/Monte-carlo differential pore size distribution based on N<sub>2</sub> at 77K on silica (cylindr./sphere. pore, NLDFT ads. Model) is shown in inset.

### Recycling studies of Pd-LHMS-3:



**Fig S3:** Plot of the % yield of the cross coupled product with time for sonogashira coupling reaction of iodo benzene with phenyl acetylene.



**Fig. S4:** TGA-DTA graph of Pd-LHMS-3