

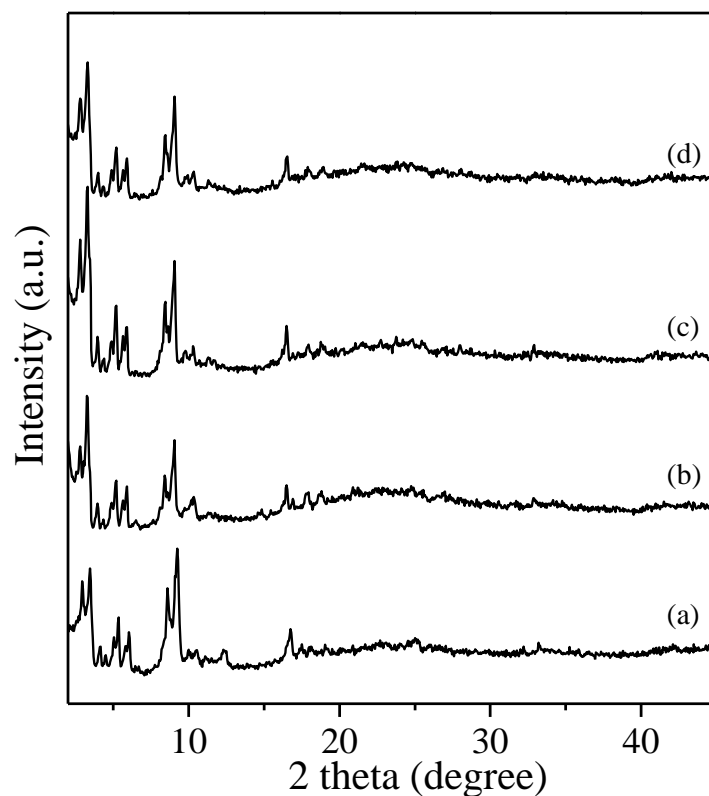
*Electronic Supplementary Informations:*

## Post-synthesis functionalization of MIL-101 using diethylenetriamine: A study on adsorption and catalysis

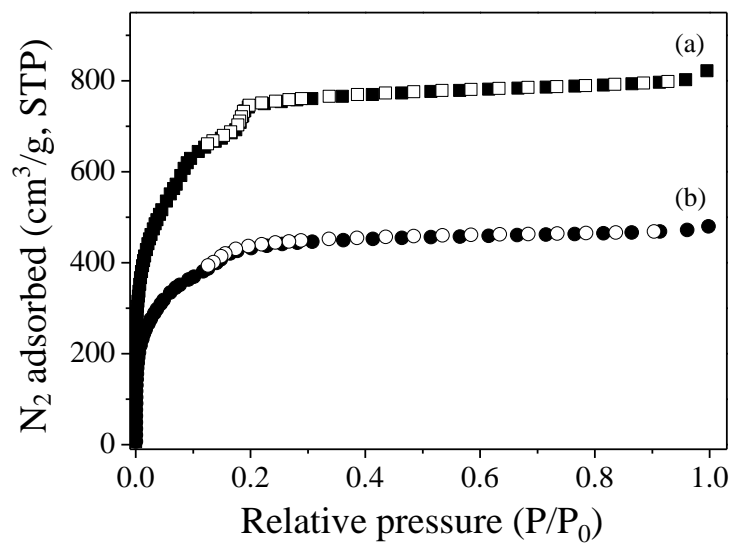
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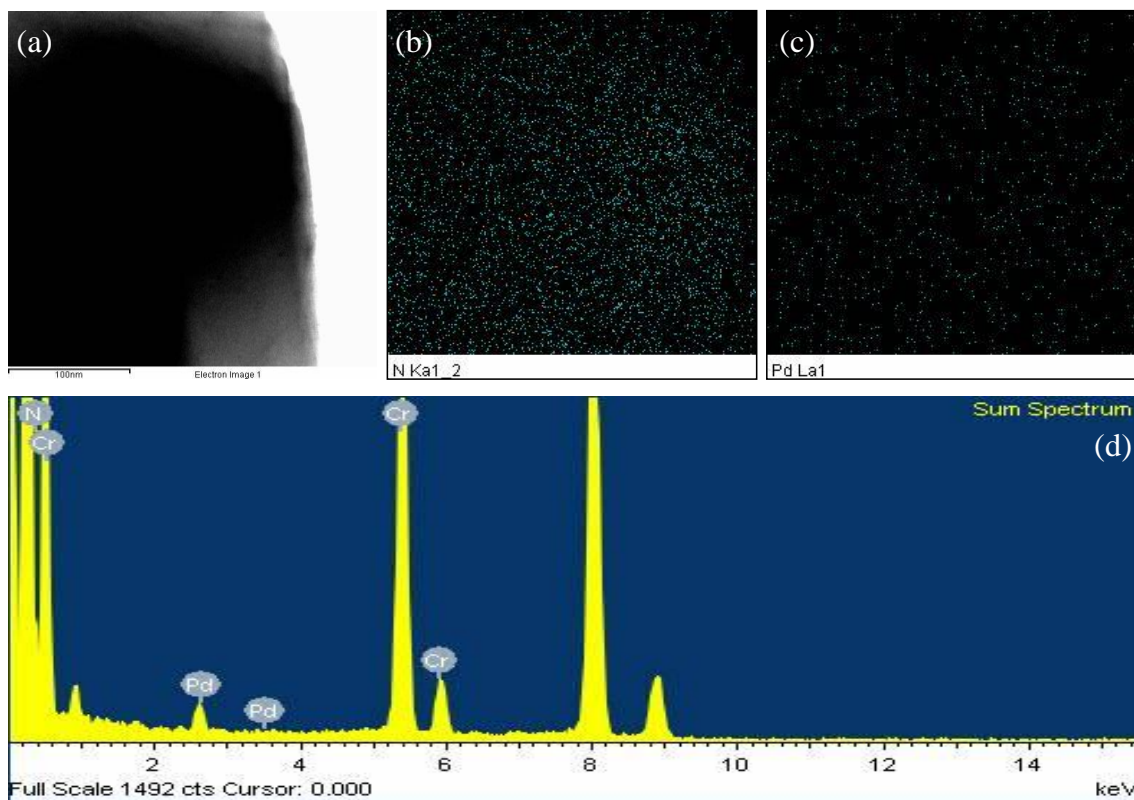
E-mail : [whasahn@inha.ac.kr](mailto:whasahn@inha.ac.kr)



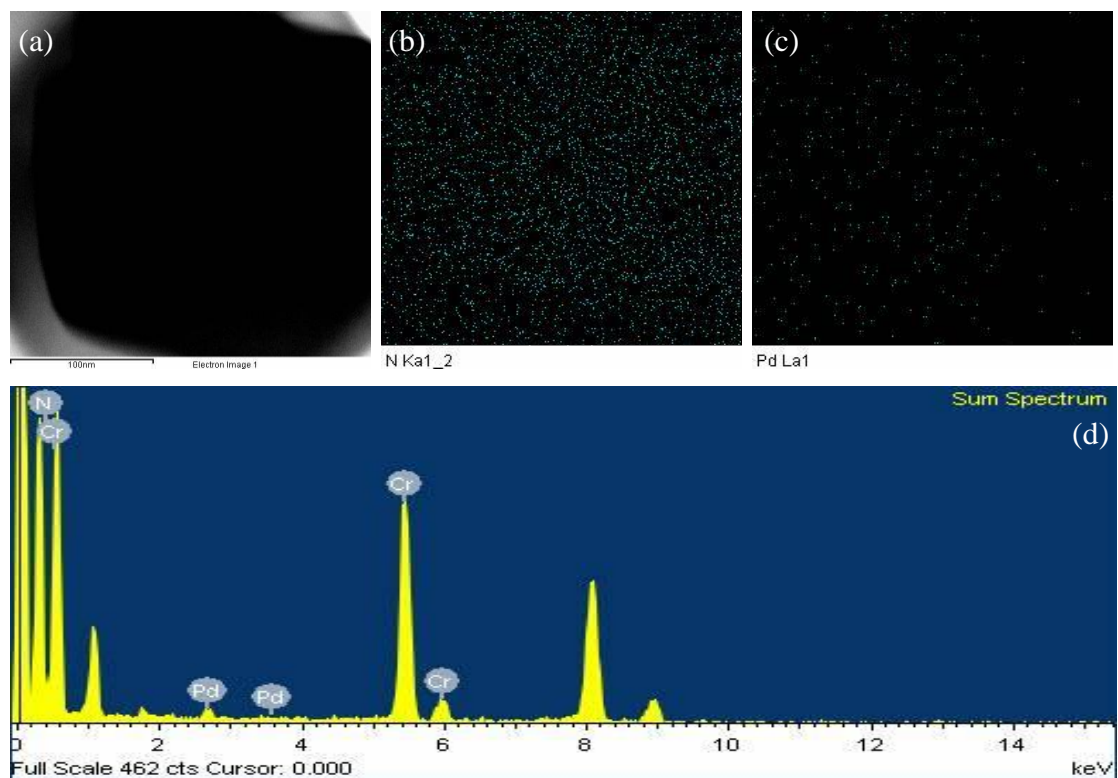
**Fig. S1** Powder XRD patterns of (a) MIL-101, (b) DETA-MIL-101, (c) Pd<sub>3.1</sub>-DETA-MIL-101 and (d) Pd<sub>0.9</sub>-DETA-MIL-101.



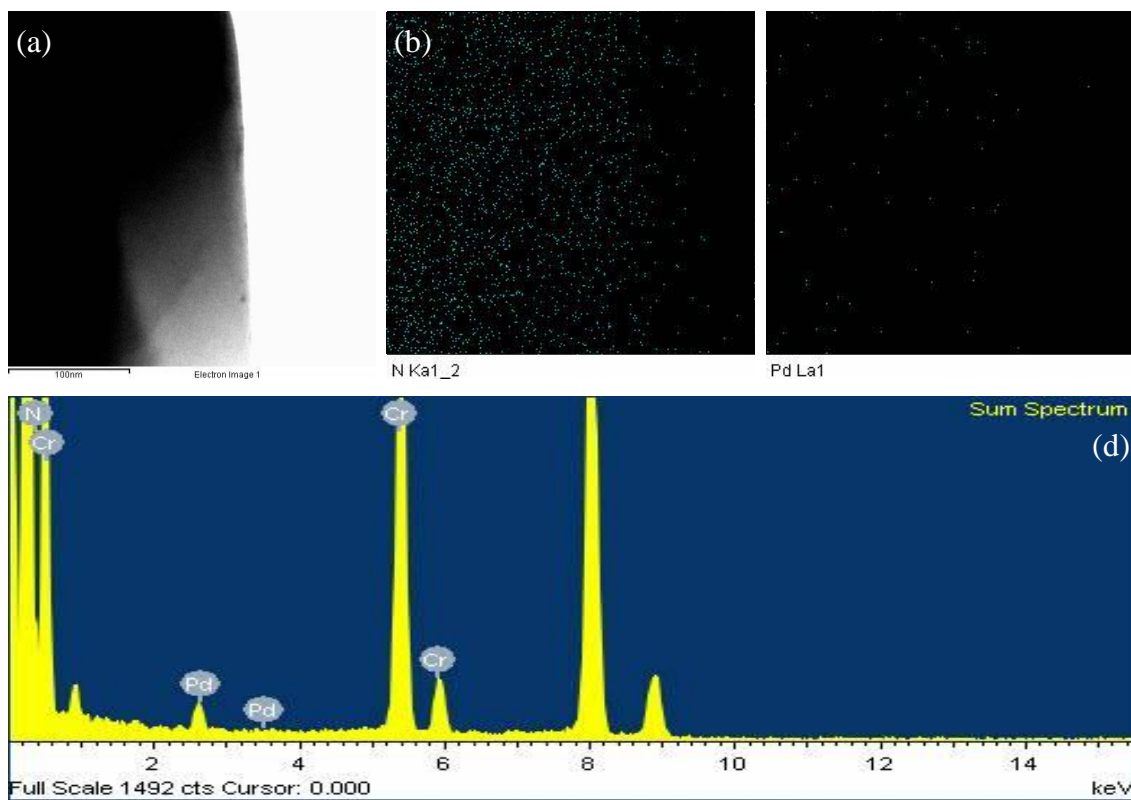
**Fig. S2** N<sub>2</sub> adsorption-desorption isotherms of (a) MIL-101 and (b) DETA-MIL-101; filled mark represents the adsorption and blank mark is the desorption.



**Fig. S3** TEM-EDX mapping images of Pd<sub>3.1</sub>-DETA-MIL-101: (a) HR-TEM image, (b) N content and (c) Pd content mapping images, and (d) TEM-EDX spectra.



**Fig. S4** TEM-EDX mapping images of Pd<sub>1.0</sub>-DETA-MIL-101: (a) HR-TEM image, (b) N content and (c) Pd content mapping images, and (d) TEM-EDX spectra.



**Fig. S5** TEM-EDX mapping images of Pd<sub>0.5</sub>-DETA-MIL-101: (a) HR-TEM image, (b) N content and (c) Pd content mapping images, and (d) TEM-EDX spectra.