catalysts

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Article

Supplementary Materials: Testing Metal–Organic Framework Catalysts in a Microreactor for Ethyl Paraoxon Hydrolysis

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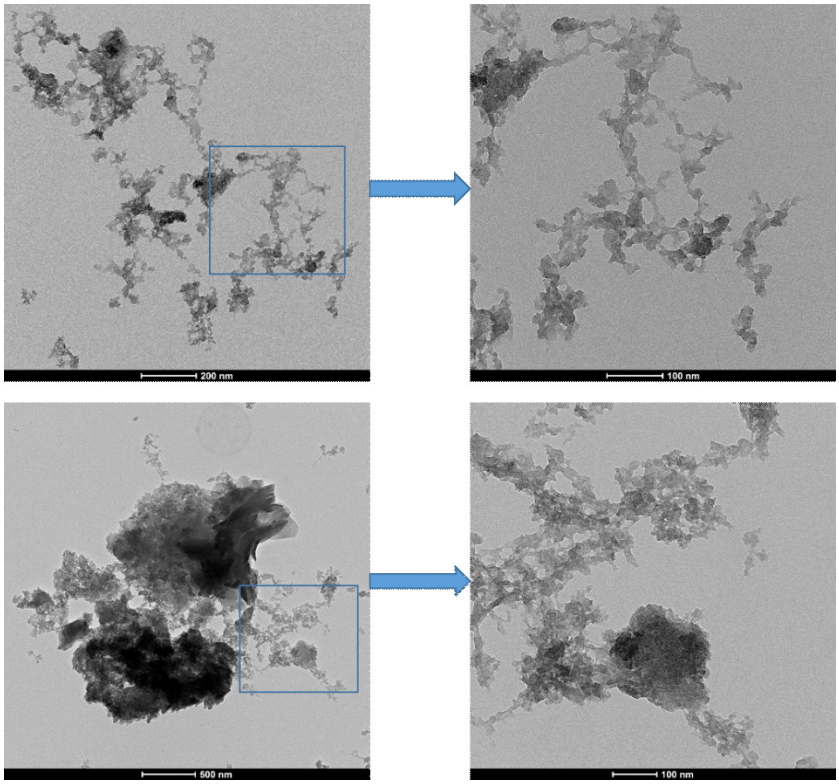

Figure S1. TEM images of **1**.

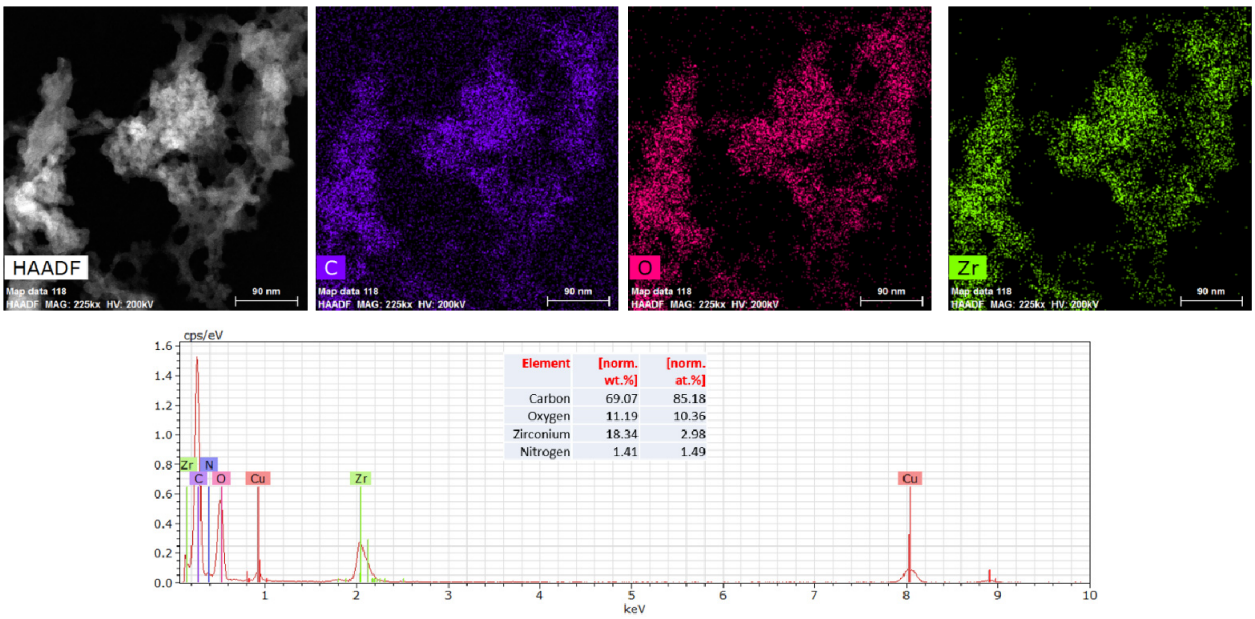

Figure S2. TEM-EDS-elemental mapping and EDX-elemental distributions of **1**.

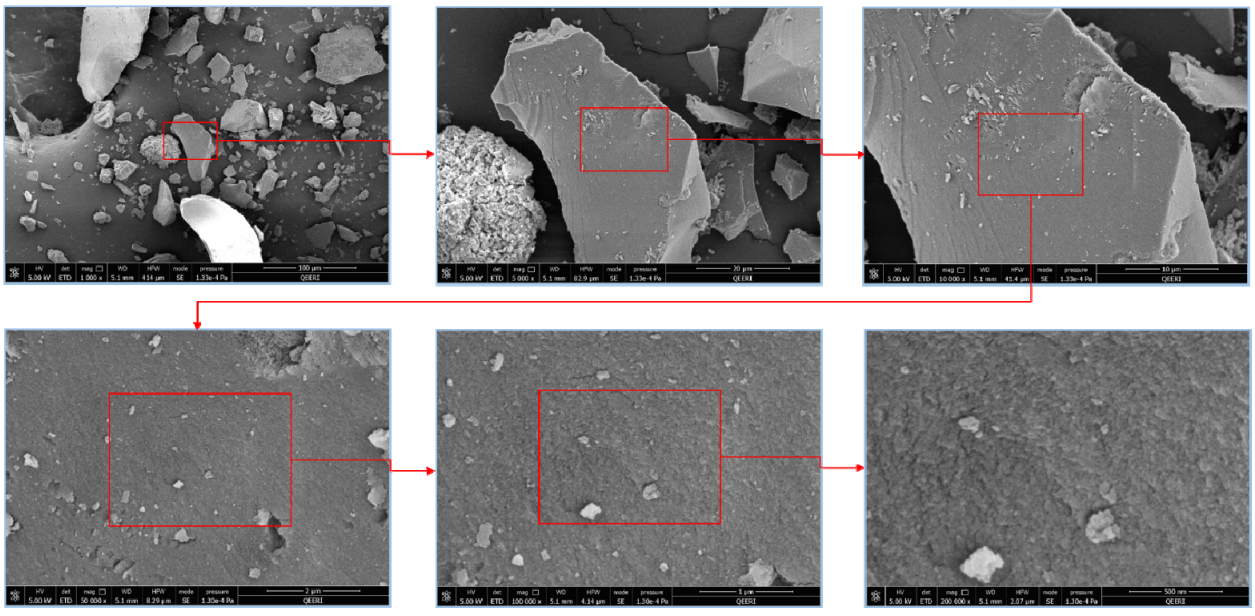

Figure S3. SEM images of **1**.

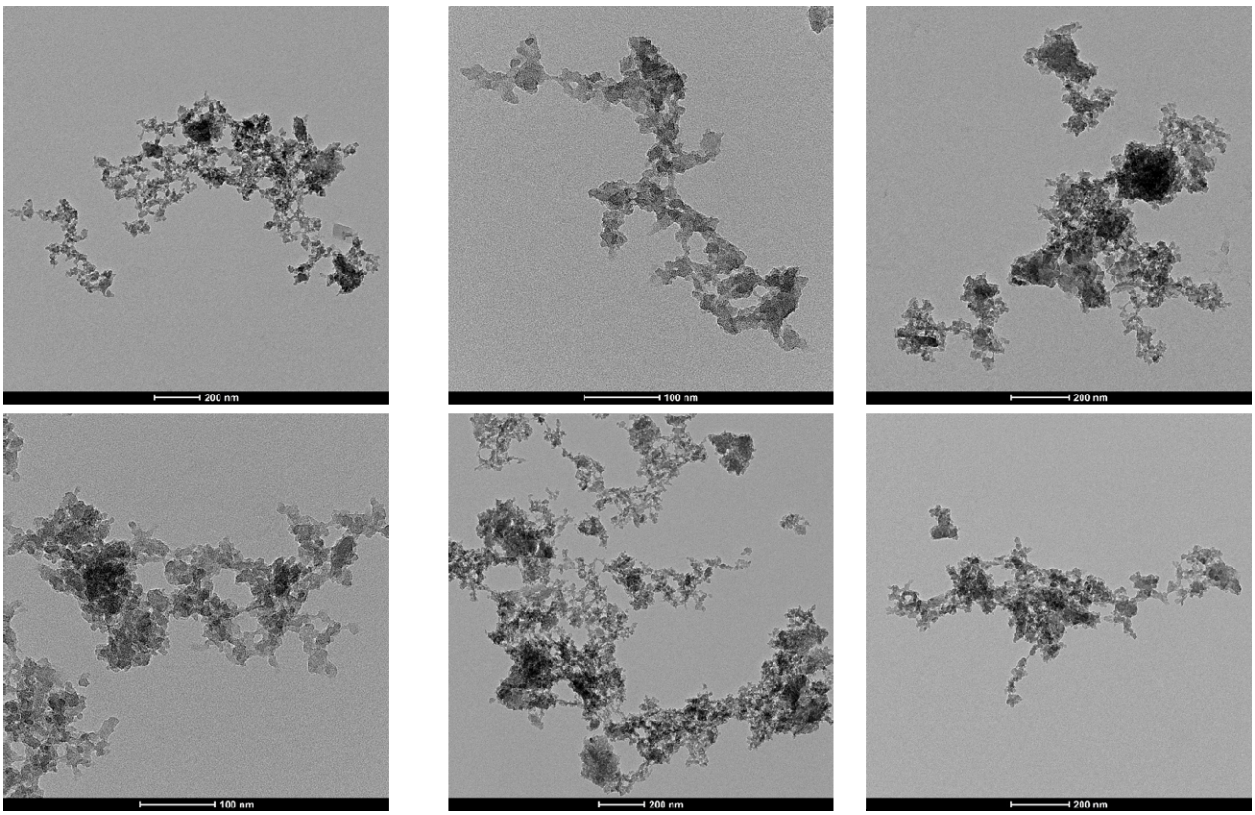

Figure S4. TEM images of **1a**.

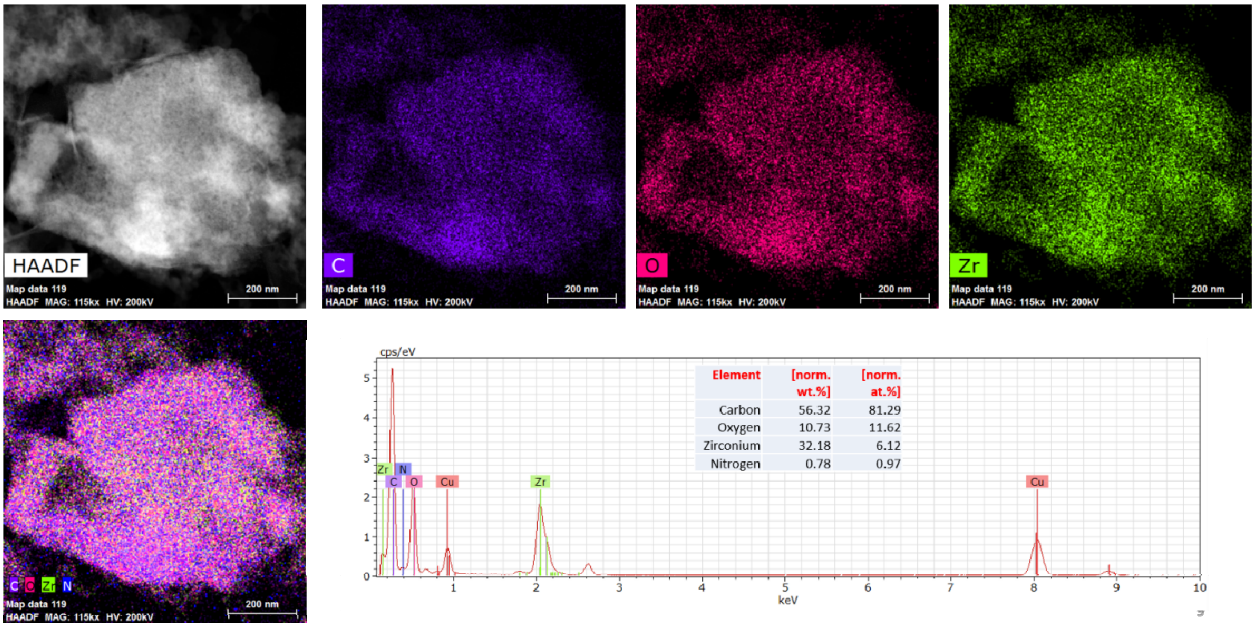

Figure S5. TEM-EDS-elemental mapping and EDX-elemental distributions of **1a**.

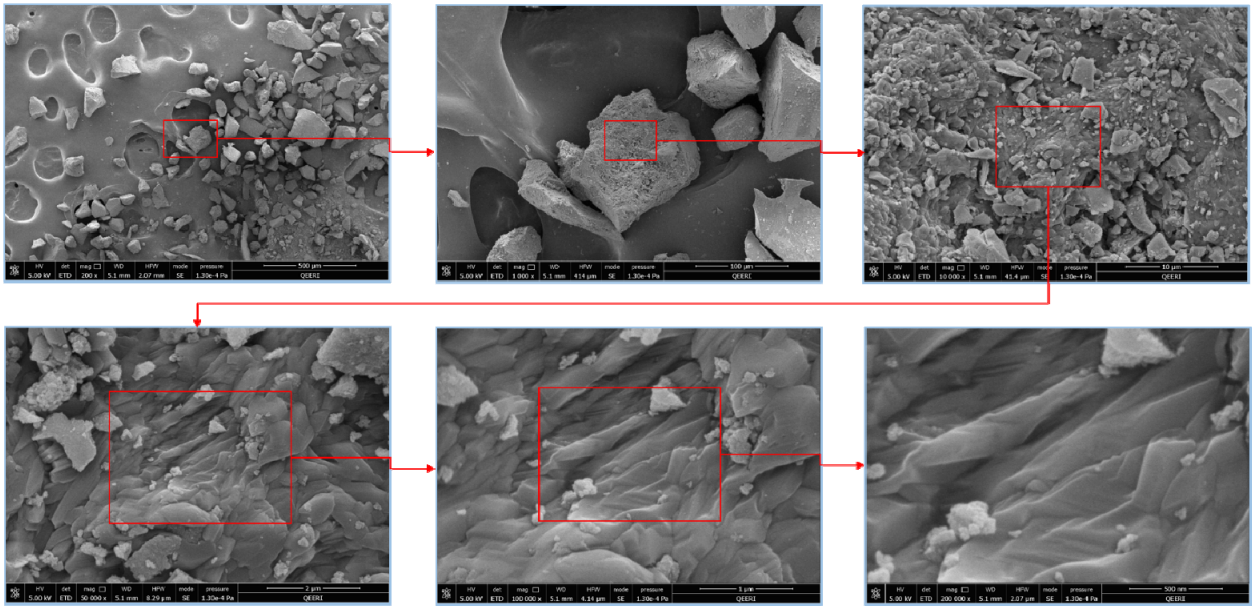

Figure S6. SEM images of **1a**.

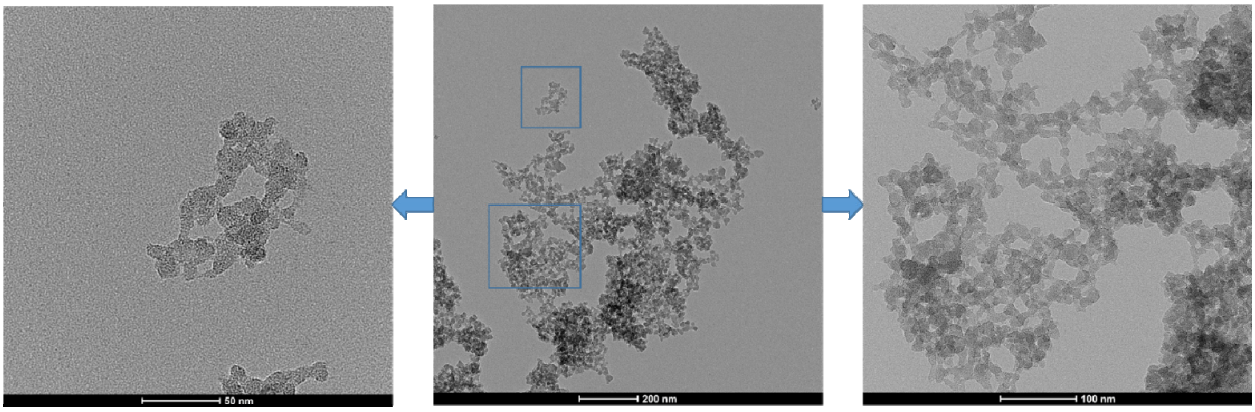

Figure S7. TEM images of **4**.

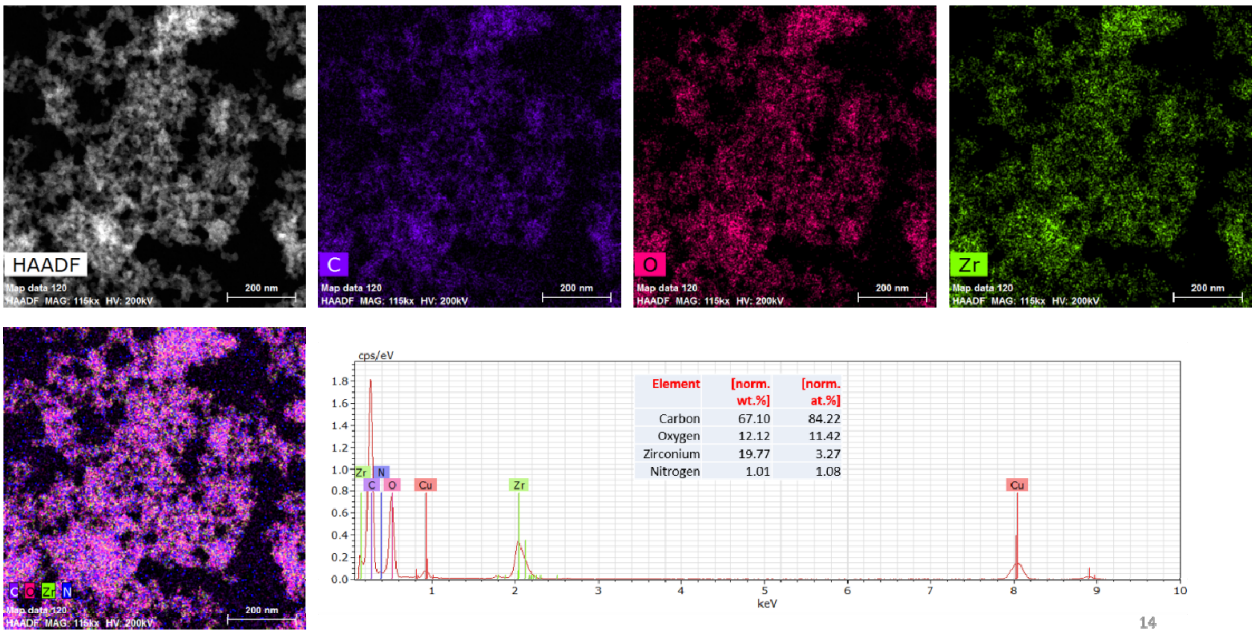

Figure S8. TEM-EDS-elemental mapping and EDX-elemental distributions of **4**.

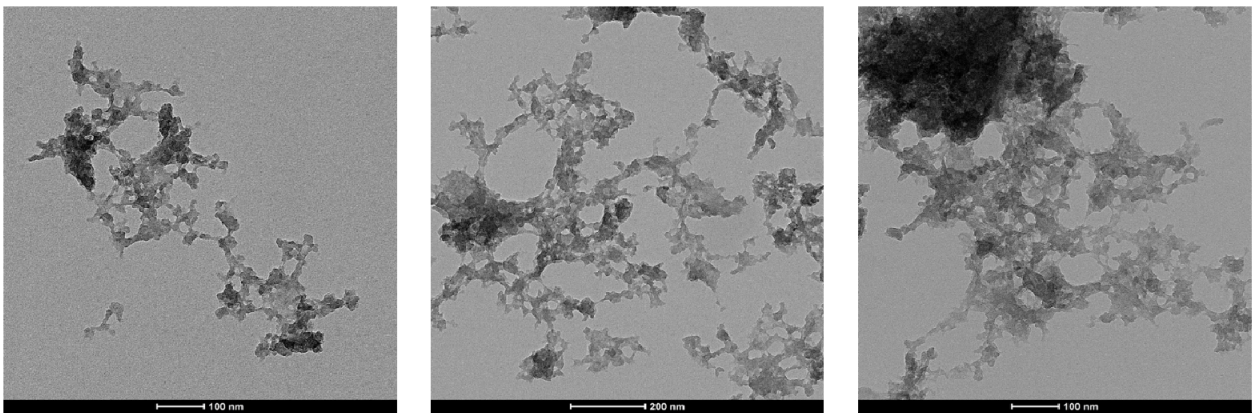

Figure S9. TEM-EDS-elemental mapping and EDX-elemental distributions of **4a**.

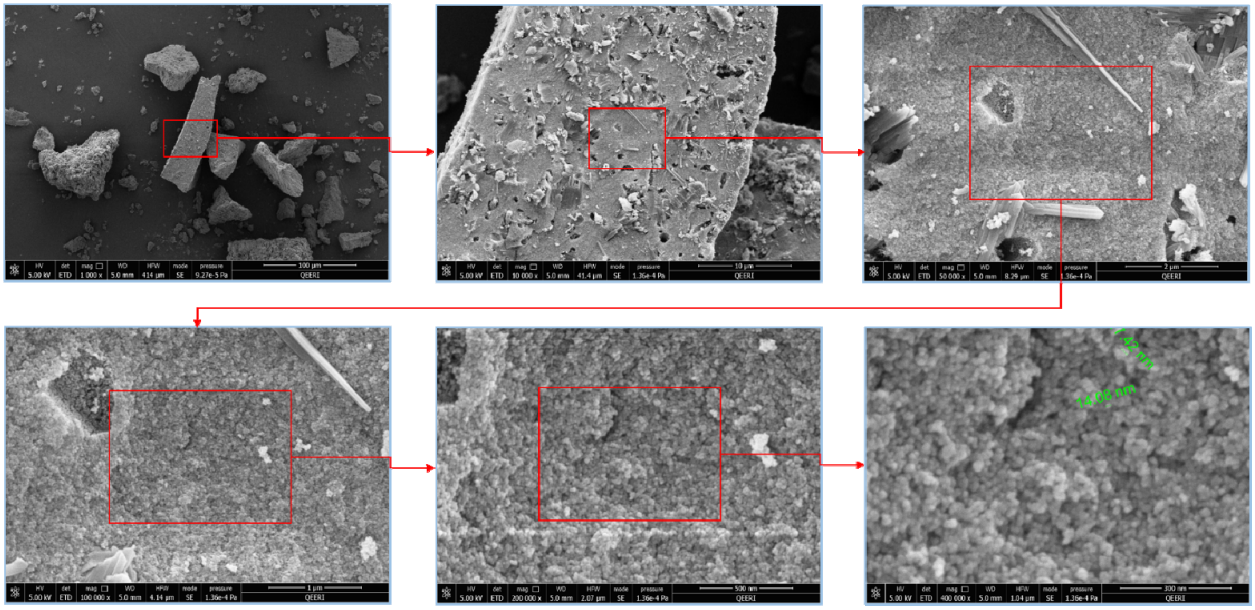

Figure S10. SEM images of **4a**.

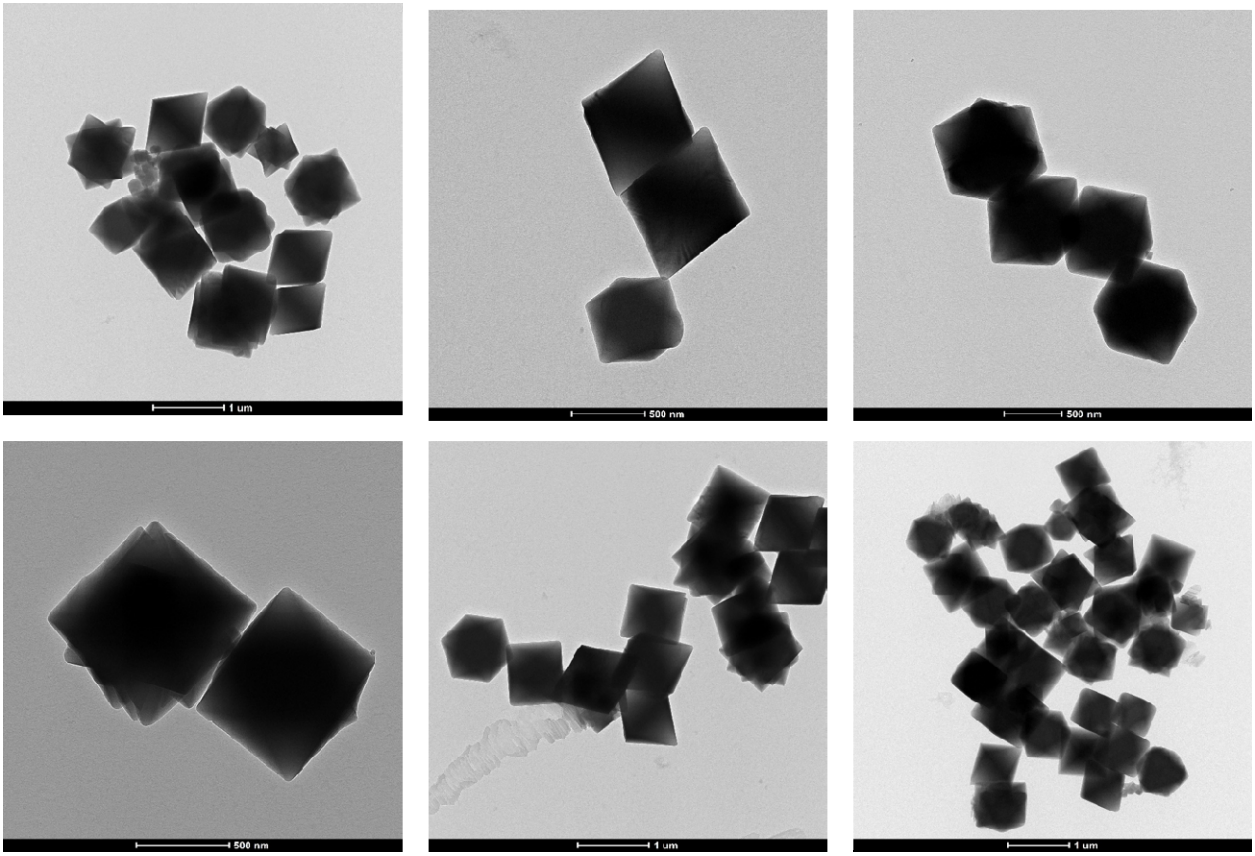

Figure S11. TEM images of **3**.

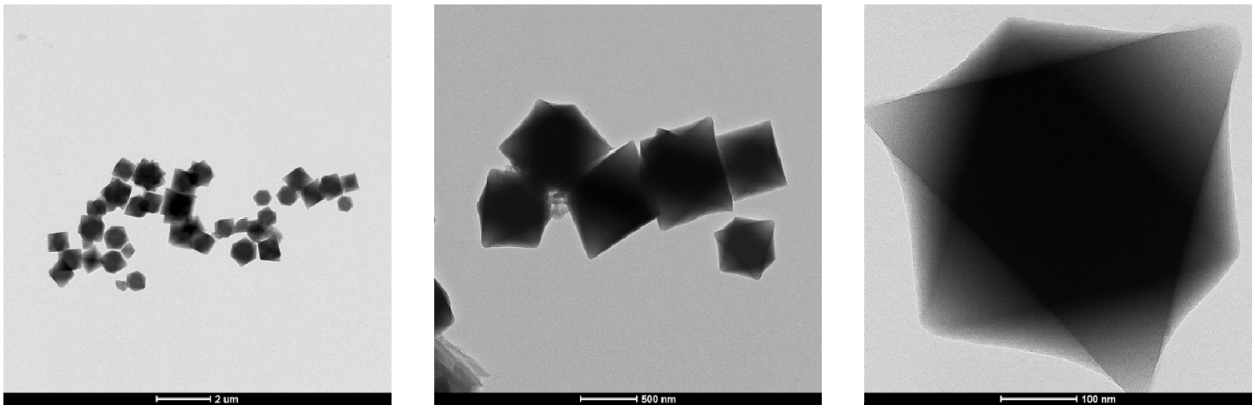

Figure S12. TEM images of **3a**.

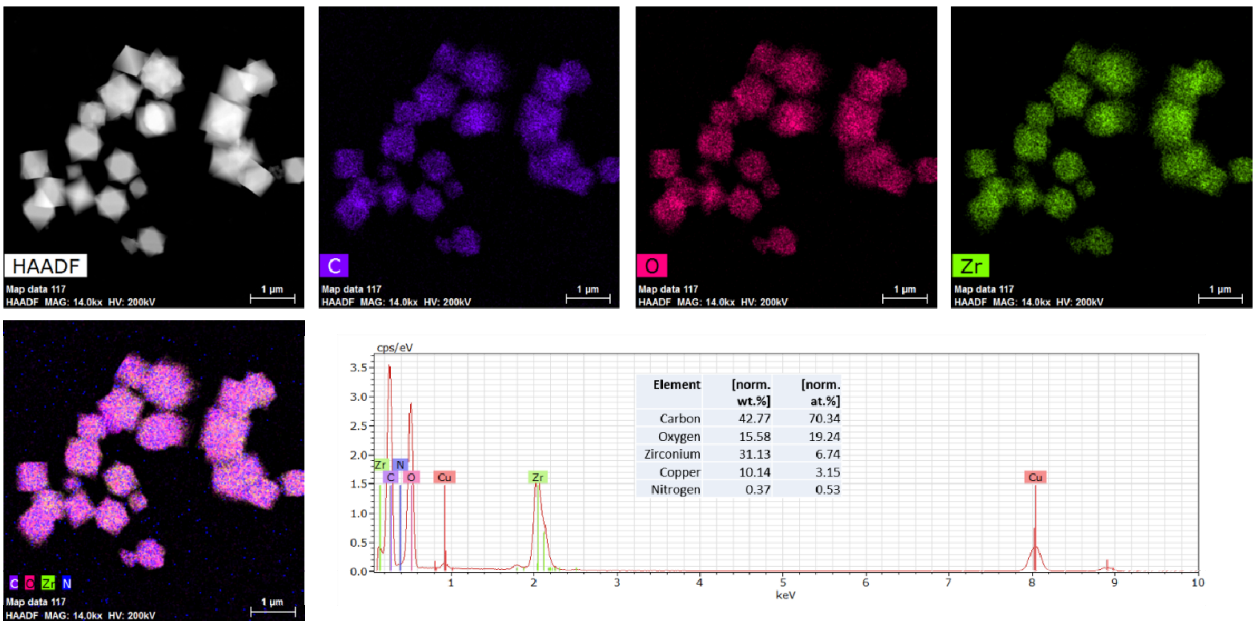

Figure S13. TEM-EDS-elemental mapping and EDX-elemental distributions of **3a**.

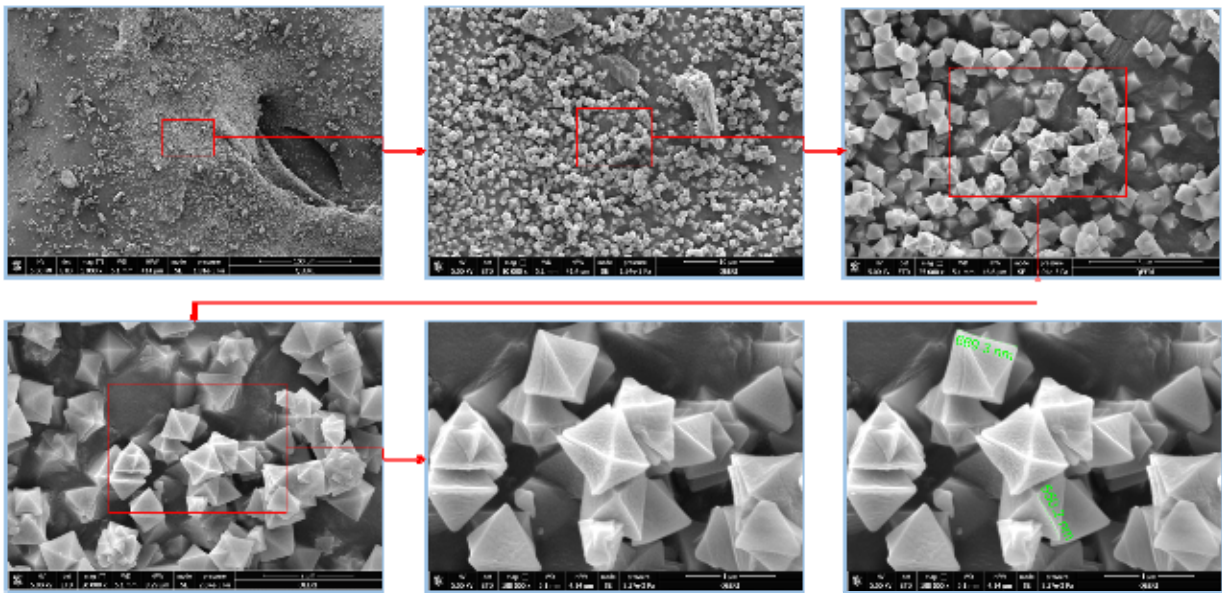

Figure S14. HR-TEM and EDS elemental mapping images with EDX pattern (left) and FE-SEM images (right) of **3a**.

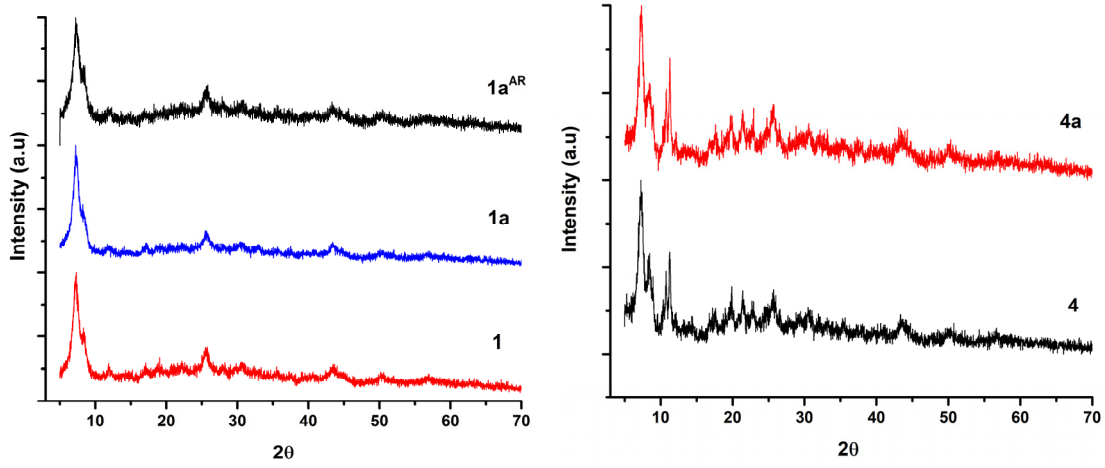

Figure S15. PXRD patterns of **1**, **1a** and **1a**^{AR} (left) and **4** and **4a** (right).

^{AR}After catalytic run.

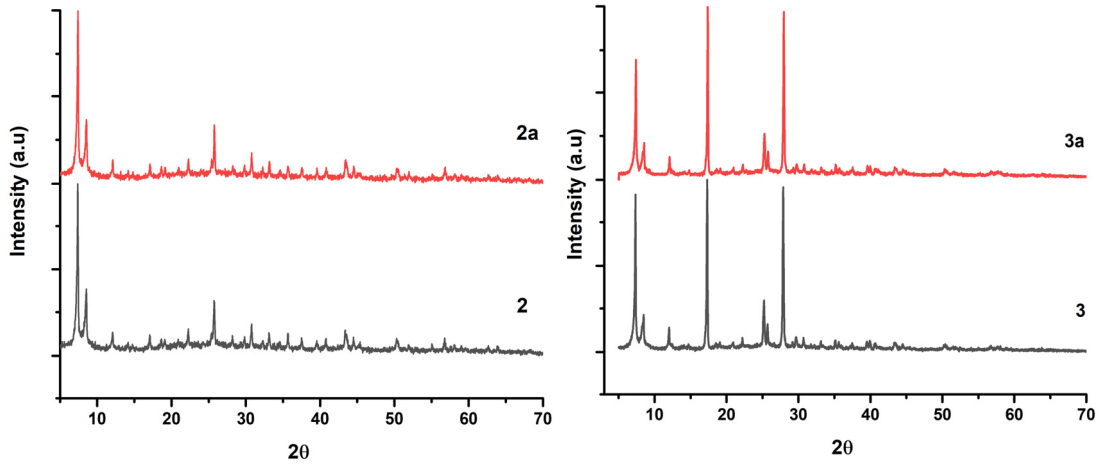

Figure S16. PXRD patterns of **2** and **2a** (left), and **3** and **3a** (right).

Table S1. BET surface areas and pore volume for prepared MOFs.

MOF	BET surface area ($m^2\ g^{-1}$)	Pore volume ($cm^3\ g^{-1}$)
1	222	0.26
1a	180	0.23
1a^{AR}	216	0.20
2a	116	0.09
3a	34	0.06
4	217	0.26
4a	204	0.24

^{AR}After catalytic run.

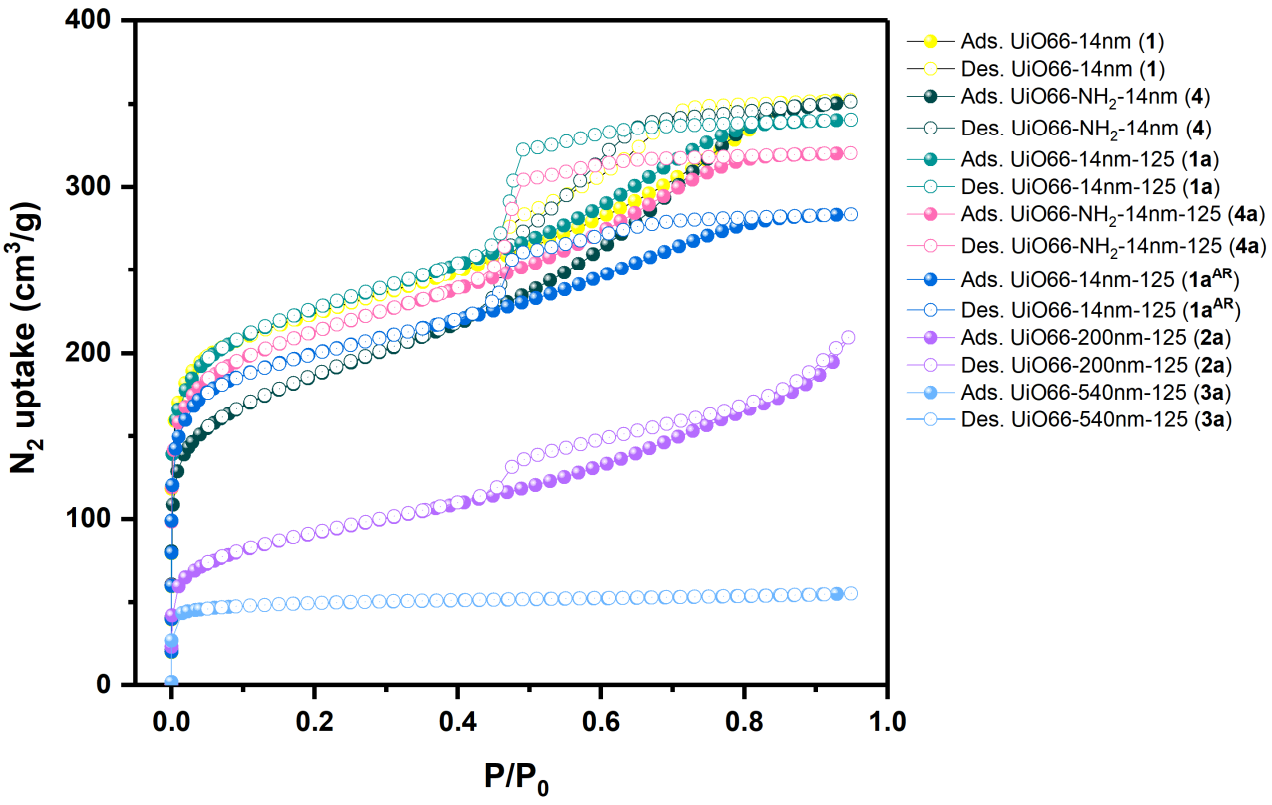

Figure S17. N_2 adsorption-desorption isotherms.

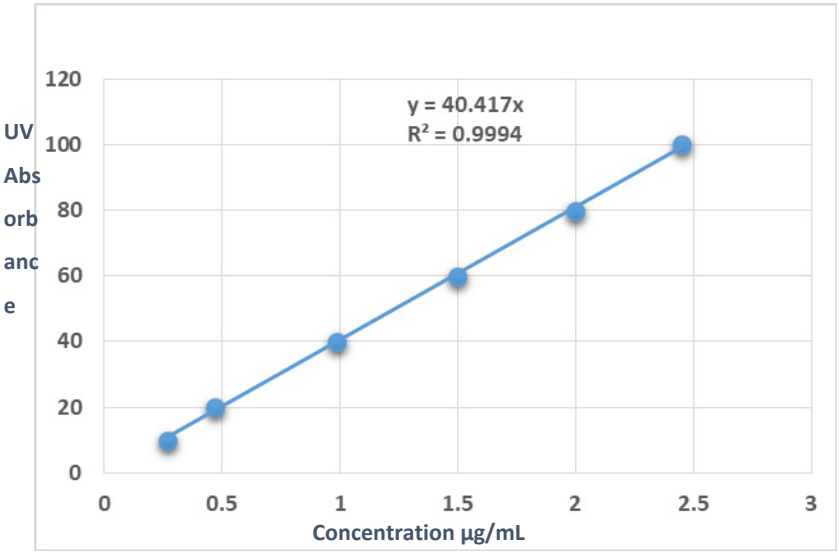

Figure S18. UV-Vis calibration curve of p-nitrophenol.

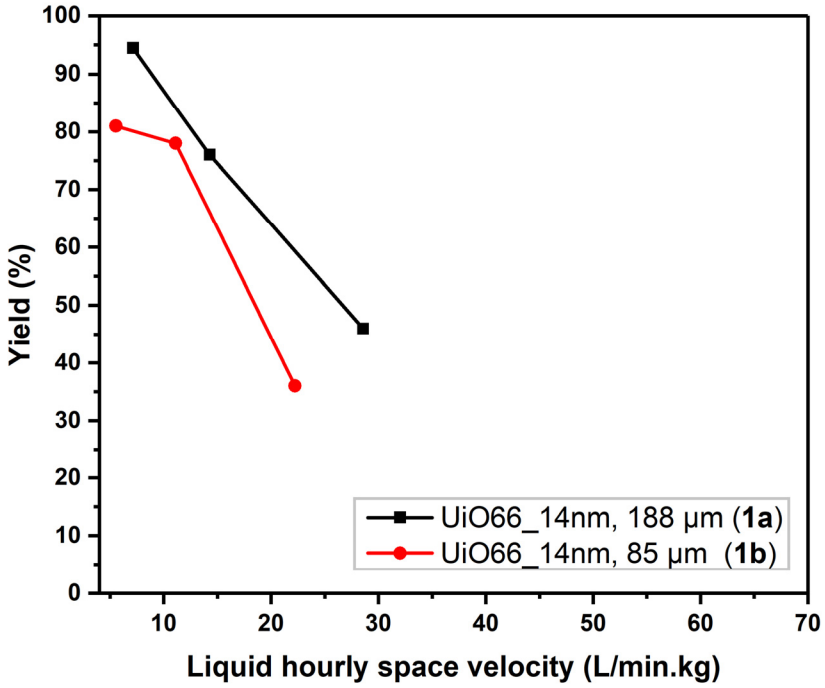

Figure S19. Reaction yield using MOF catalysts **1** at varied flow rates and catalyst particle sizes of reactor 1 (**1a**) and reactor 2 (**1b**).