

Electronic Supporting Information for:

Zeolitic Imidazolate Framework Monoliths with high Mesoporosity and Effective Adsorption of Toluene from Aqueous Solution

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S1 Scanning Electron Microscopy (SEM)

IPD-mesoMOF-12(Zn):

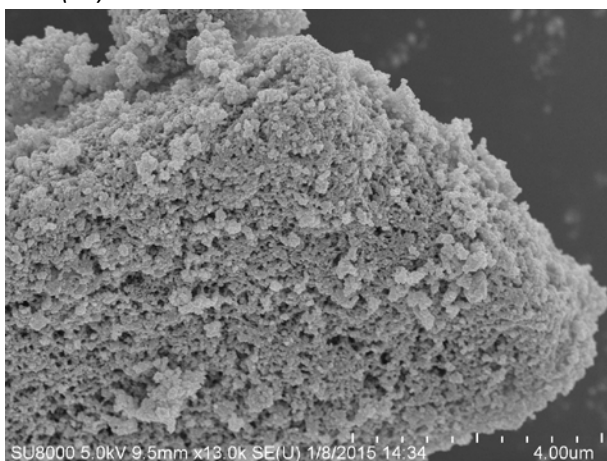


Fig.S1-1 SEM image of IPD-mesoMOF-12a monolith

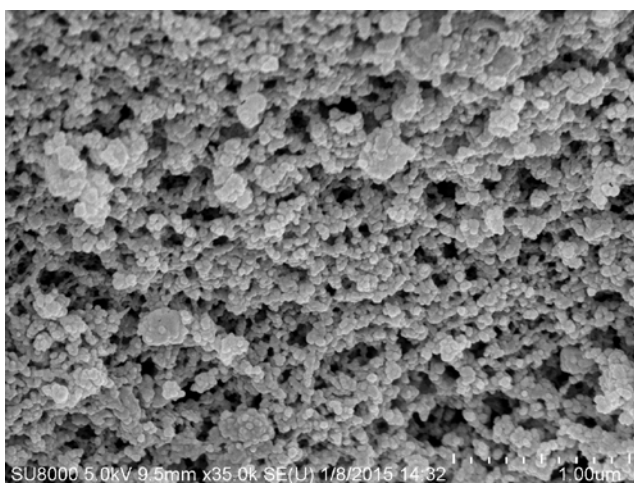


Fig.S1-2 SEM image of IPD-mesoMOF-12a

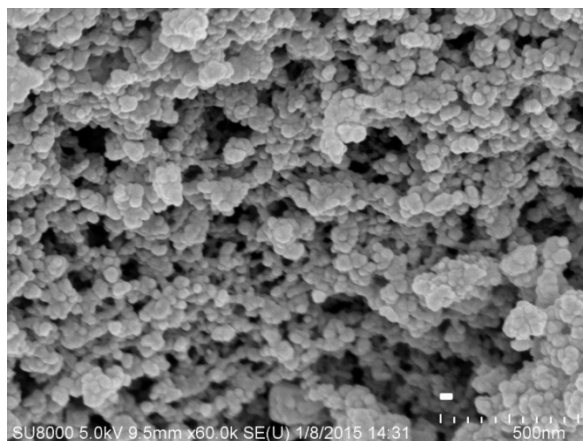


Fig.S1-3 SEM image of IPD-mesoMOF-12a

IPD-mesoMOF-12(Co):

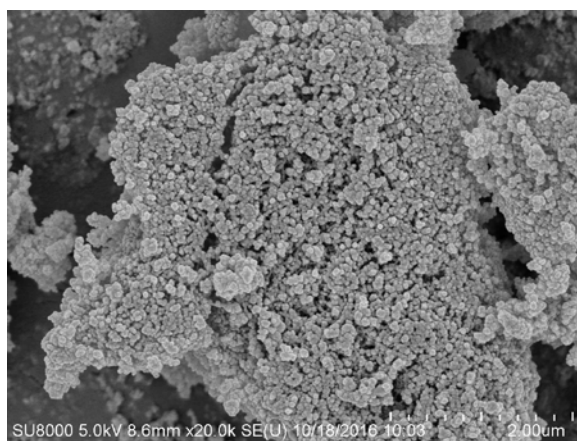


Fig.S1-4 SEM image of IPD-mesoMOF-12(Co)

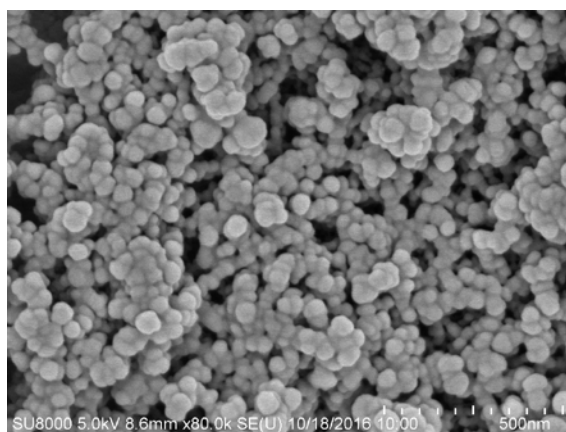


Fig.S1-5 SEM image of IPD-mesoMOF-12(Co)

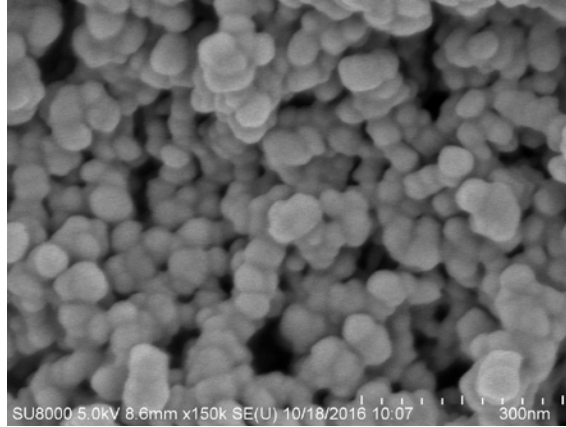


Fig.S1-6 SEM image of IPD-mesoMOF-12(Co)

S2 N₂ adsorption isotherm on IPD-mesoMOF-12

IPD-mesoMOF-12(Zn):

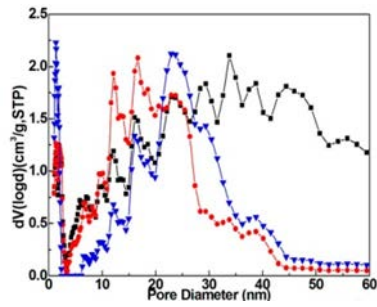


Fig.S2-1 The pore size distribution of IPD-mesoMOF-12a, -12b and -12c monoliths, respectively.

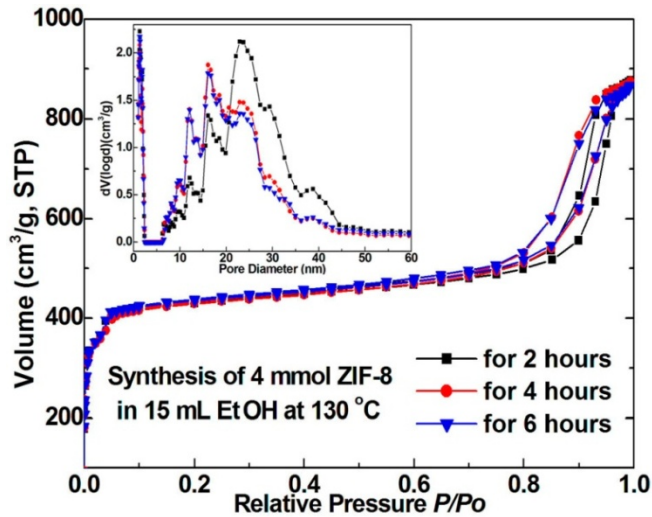


Fig.S2-2 Nitrogen adsorption-desorption isotherm of IPD-mesoMOF-12(Zn) prepared in different solvothermal times

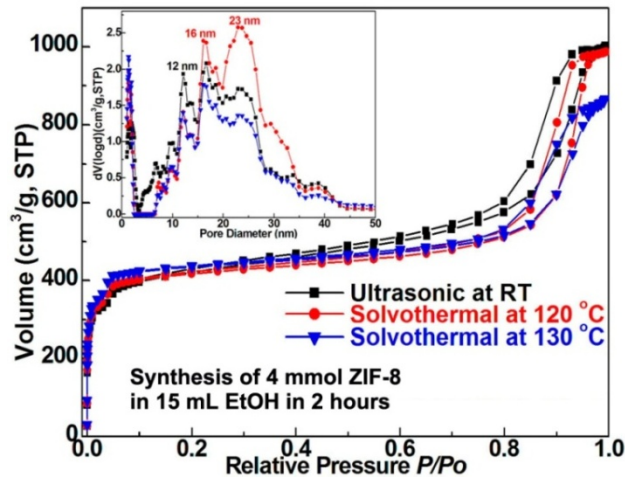


Fig.S2-3 Nitrogen adsorption-desorption isotherm of IPD-mesoMOF-12(Zn)
Prepared at different temperature

IPD-mesoMOF-12(Co):

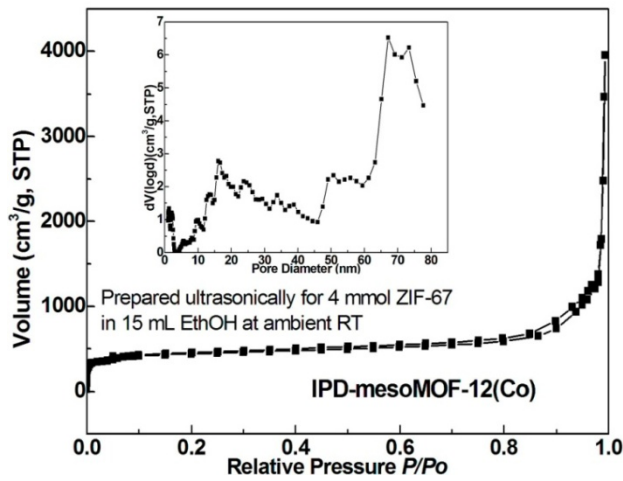


Fig.S2-4 Nitrogen adsorption-desorption isotherm of IPD-mesoMOF-12(Co)

S3 Toluene adsorption on IPD-mesoMOF-12(Zn)

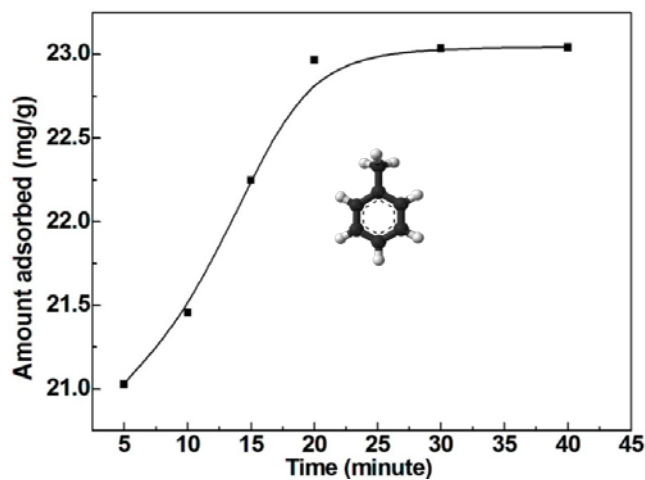


Fig.S3-1 Toluene adsorption kinetics on IPD-mesoMOF-12

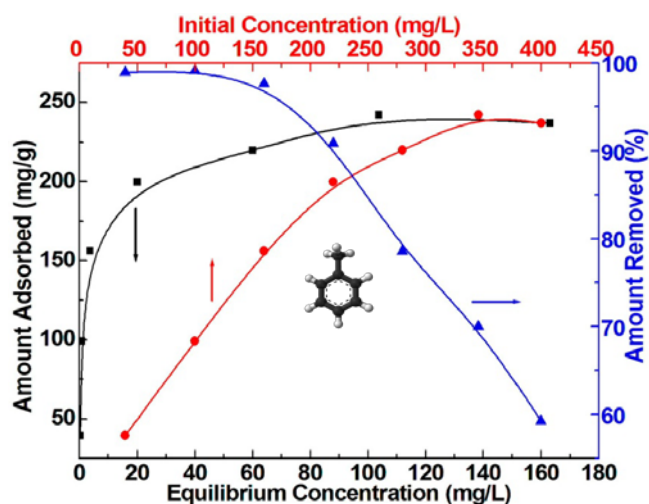


Fig.S3-2 Toluene adsorption on IPD-mesoMOF-12 and removed from water

S4. The porous property summary of IPD-mesoMOF-12

Table S-1

Samples	Pore Structure characteristic					
	$S_{BET}(m^2/g)$	$S_{micro}(m^2/g)$	$S_{meso}(m^2/g)$	$V_{micro}(cm^3/g)$	$V_{meso}(cm^3/g)$	$V_{total}(cm^3/g)$
IPD-mesoMOF-12a(Zn)	1706	1136	571	0.42	1.70	2.12
IPD-mesoMOF-12b(Zn)	1665	1168	498	0.43	1.12	1.55
IPD-mesoMOF-12c(Zn)	1732	1500	232	0.56	0.80	1.36
IPD-mesoMOF-12(Co)(RT)	1728	1243	485	0.47	5.6 5	6.12

S5. XRPD pattern for one recycled IPD-mesoMOF-12

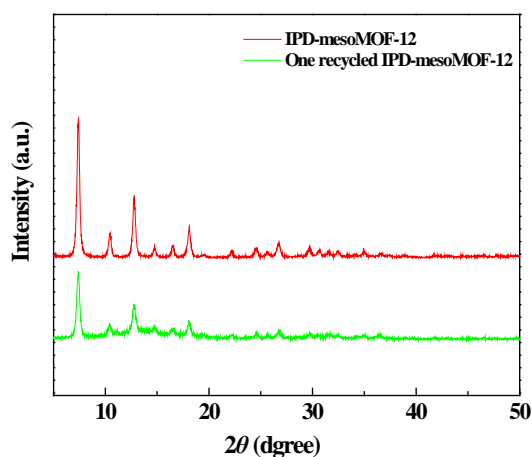


Fig.S5-1 XRPD patterns of IPD-mesoMOF-12 and one recycled IPD-mesoMOF-12.