

Catalysts Based on Porous Polyaromatic Frameworks for Deep Oxidative Desulfurization of Model Fuel in biphasic conditions

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Supporting information

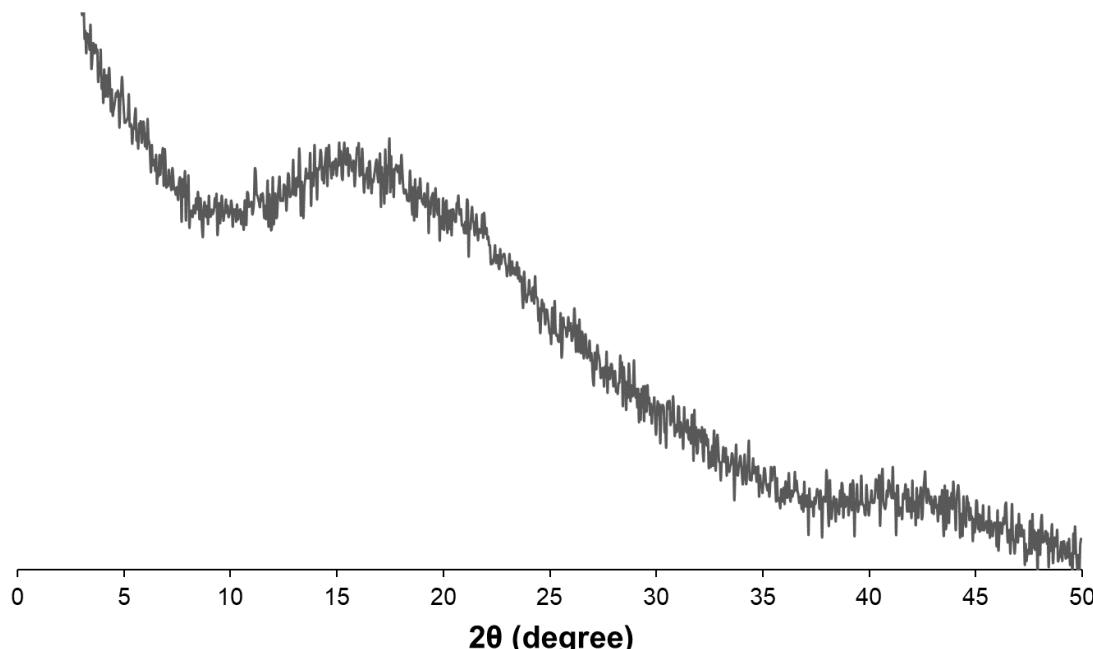


Figure S1. X-ray diffraction pattern of PAF-30

Table S1. Concentrations of elements in near-to-surface area in PAF-30-Mo catalyst XPS before and after the reaction

Catalyst	Parameter	Mo ⁰	MoO _x	MoO ₃
PAF-Mo-30	Binding energy, eV	3d _{3/2} , 227.78 eV 3d _{5/2} , 230.80 eV	3d _{3/2} , 231.53 eV 3d _{5/2} , 234.77 eV	3d _{3/2} , 232.86 eV 3d _{5/2} , 236.02 eV
	Content, %	1%	60%	39%
PAF-30-Mo (after reaction)	Binding energy, eV	—	3d _{3/2} , 231.53 eV 3d _{5/2} , 234.65 eV	3d _{3/2} , 232.87 eV 3d _{5/2} , 235.96 eV
	Content, %	—	12%	88%

Table S2. Peak parameters for XPS spectra of PAF-30-Mo catalyst before and after the reaction

Catalyst	Elements, their atomic and weight concentrations			
	C	O	Mo	P
PAF-30-Mo Mo – 9.44 wt.% (by ICP AES)	85.8 % (mol.)	12.0 % (mol.)	1.8 % (mol.)	0.4 % (mol.)
	73.2 % (mass)	13.6 % (mass)	12.3 % (mass)	0.9 % (mass)
PAF-30-Mo (after reaction) Mo – 3.96 wt.% (by ICP AES))	90.9 % (mol.)	8.4 % (mol.)	0.4 % (mol.)	0.3 % (mol.)
	85.7 % (mass)	10.6 % (mass)	3.0 % (mass)	0.7 % (mass)