Preparation of highly interconnected porous polymer microbeads *via* suspension polymerization of high internal phase emulsions for fast removal of oil spillage from aqueous environment

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Gel fraction

The 2-m-80% sample of P(BA-SMA-St-DVB) polyHIPE monolith was extracted in a Soxhlet apparatus by different good solvents for 24 h, and then dried in a vacuum oven at 50 °C to constant weight. The gel faction can be calculated by the following formula (1):

$$\frac{W_1}{W_0} \times 100\%$$
Gel fraction (%) = $\frac{W_0}{W_0}$ (1)

where W_0 is the original weight of 2-m-80% sample, W_1 is the the weight of 2-m-80% sample after extraction by good solvents.

Table S1 Gel fraction of 2-m-80% sample extracted by different good solvents

	Good solvents			
	Dichloroethane	Toluene	Tetrahydrofuran	Acetone
Gel fraction	99.0	99.3	99.2	99.6

Preparation of P(St-BA-SMA) monolith without the crosslinking agent

As a control experiment, P(St-BA-SMA) monolith was prepared according to the same procedure as the 2-m-80% sample except that 0.5 g of DVB was replaced by 0.5 g of styrene.

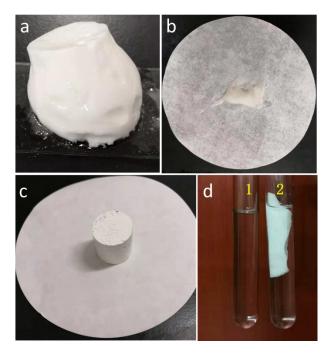


Figure S1. Digital photos: (a) The sample of P(St-BA-SMA) without post-treatment after polymerization; (b) The sample of P(St-BA-SMA) after extraction with ethanol; (c) The 2-m-80% sample of P(BA-SMA-St-DVB) after extraction with ethanol; (d) The sample of P(St-BA-SMA) fully soluble in dichloroethane (1) and the 2-m-80% sample insoluble in dichloroethane (2).