Supplementary Materials: Coordination Chemistry Inside Polymeric Nanoreactors: Metal Migration and Cross-Exchange in Amphiphilic Core-Shell Polymer Latexes

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Figure S1. $^1$H-NMR (left) and $^{31}$P-NMR (right) spectra of the BMOPP@NG latex. The spectra in D$_2$O were recorded directly after addition of D$_2$O for the instrument lock to the latex (either toluene-swollen or not). The starred resonance at $\delta$ 4.7 belongs to water. Those at $\delta$ 3.63 (strong) and 3.30 (weak) belong to the CH$_2$ and CH$_3$ protons, respectively, of the PEOMA–(OCH$_2$CH$_2$)$_{19}$–OCH$_3$ protons. The spectra in THF-D$_8$ were taken after drying the latex to a solid residue and dissolution in the NMR solvent. The resonance marked with a square at $\delta$ 1.76 belongs to the solvent, with the second one at ca. $\delta$ 3.6 being masked by the PEOMA proton resonance. The resonances marked with a circle belong to the toluene molecules hosted in the swollen polymer core.

Figure S2. Excerpt of the $^1$H-NMR spectra of BMOPP@NG after swelling with toluene in the region of the methylene and methoxy PEOMA proton resonances, and deconvolution of the CH$_3$ resonance.
Figure S3. $^{31}$P{[H]} NMR spectra of the TPP@CCM and BMOPPP@CCM latexes in D$_2$O after swelling the polymer core with toluene and 100% loading with [Rh(acac)(CO)]$_2$ or [RhCl(COD)]. The starred resonance corresponds to a small amount of oxidized phosphine.

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