Title	Ruthenium-Immobilized Periodic Mesoporous Organosilica: Synthesis, Characterization, and Catalytic Application for Selective Oxidation of Alkanes
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## Figures:

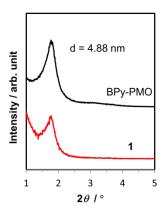


Figure S1. XRD patterns for 1 (red line) and BPy-PMO (black line).

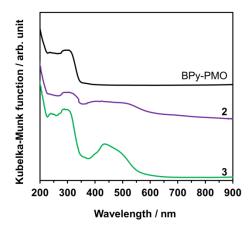


Figure S2. UV-vis DRS spectra of BPy-PMO (black), 2 (purple), and 3 (green).

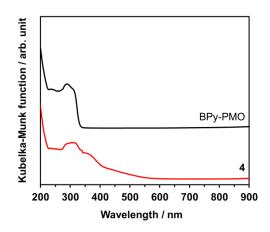
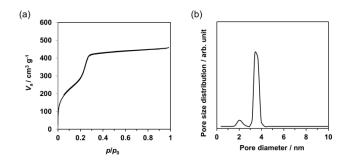
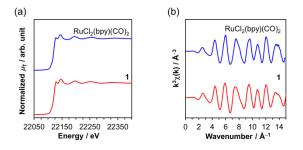


Figure S3. UV-vis DRS spectra of MCM-41 bearing BPy groups (black) and 4 (red).



**Figure S4**. (a) N<sub>2</sub> adsorption isotherm and (b) NLDFT pore diameter distribution for MCM-41 bearing BPy groups at 77 K.



**Figure S5**. (a) Ru K-edge EXAFS spectra and (b) EXAFS oscillation for **1** (red) and RuCl<sub>2</sub>(bpy)(CO)<sub>2</sub> (blue).

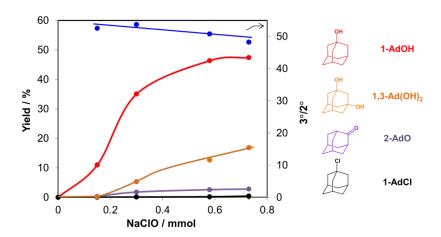


Figure S6. Time-course for the oxidation of adamantane over catalyst 1.

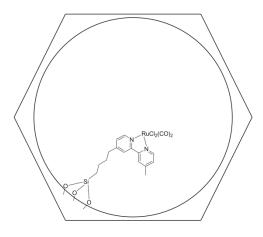


Figure S7. Structure of 4.