Supporting Information

Aerobic Oxidation of Formaldehyde Catalyzed by Polyvanadotungstates

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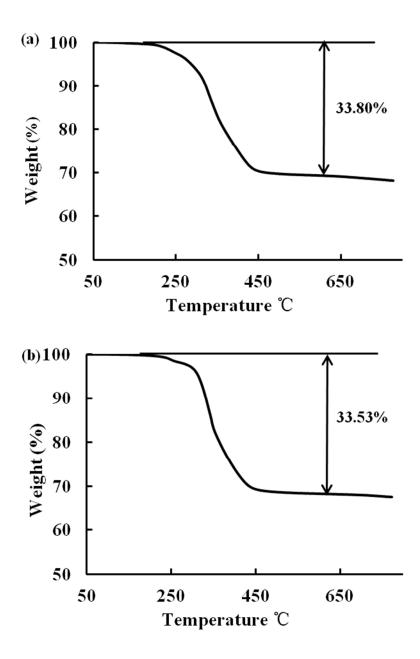
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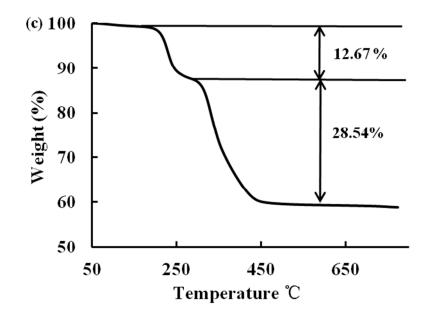
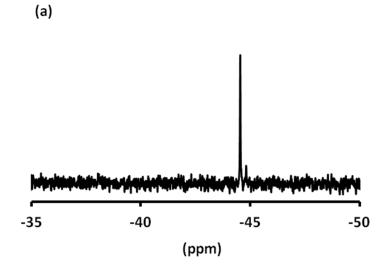
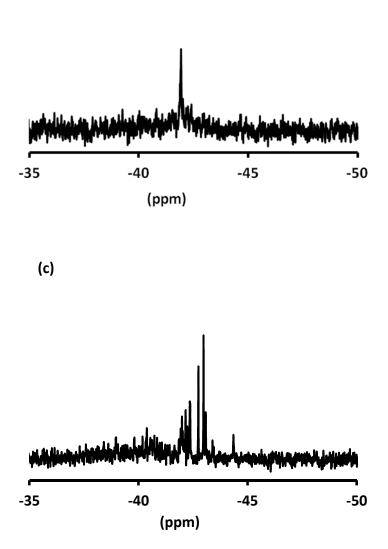


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(b)

Figure S2. ³¹P NMR of (a) PW_9V_3 , (b) PW_8V_4 and (c) PW_6V_6 with respect to 85% H₃PO₄(0 ppm)

Entry	[PW ₈ V ₄]	Initial [CH2O]	CH ₂ O conversion (%) ^b	TON ^c
1	3.8 mM	0.065 M	12	2
2	3.8 mM	0.130 M	21	7
3	3.8 mM	0.260 M	31	21
4	3.8 mM	0.520 M	35	47
5	7.6 mM	0.520 M	45	31
6	11.4 m M	0.520 M	48	22
7	15.3 mM	0.520 M	47	16
8	19.1 mM	0.520 M	45	12

Table S1. Aerobic Oxidation of Formaldehyde Catalyzed by PW_8V_4 , as a Function of Substrate and Catalyst Concentration^{*a*}

^{*a*} Reaction Conditions: concentration of formaldehyde $[CH_2O] = 0.065 \text{ M} - 0.52 \text{ M}$, concentration of catalyst $[PW_8V_4] = 3.8 \text{ mM} - 19.1 \text{ mM}$, 1 atm of air, 2 mL of solvent, ambient temperature, 144 h. ^{*b*} CH₂O conversion (%) = moles of CH₂O consumed/moles of initial CH₂O. ^{*c*} TON = moles of formaldehyde consumed/moles of catalyst.

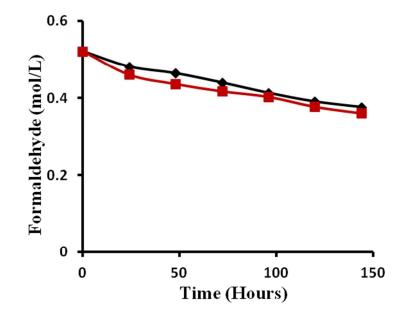


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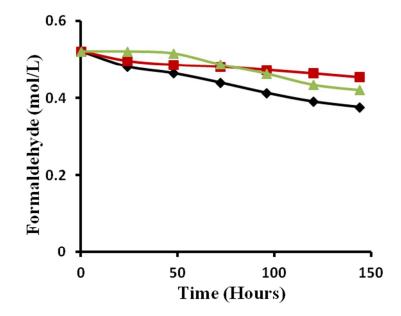


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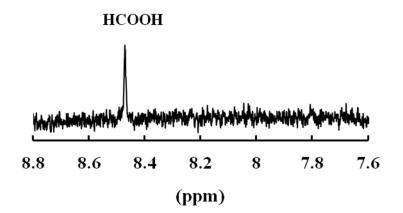


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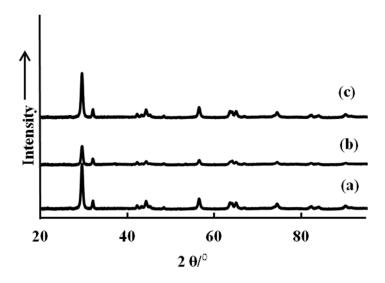
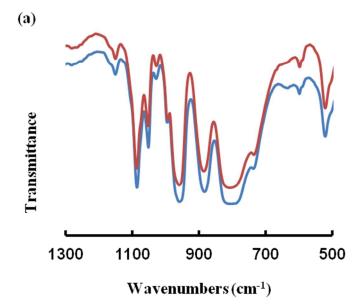


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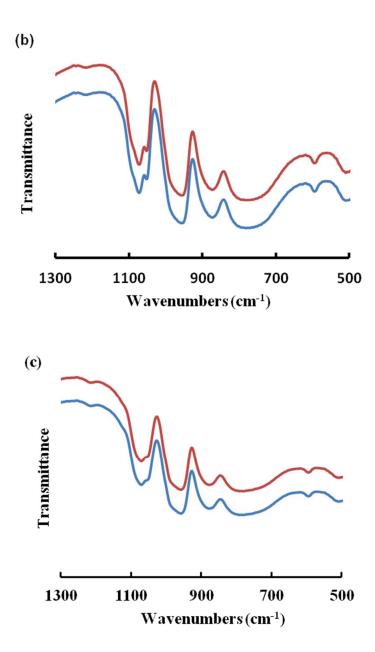


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