Supplementary Information

Heteropoly Tungstate Supported on Metal Oxide Catalysts for Liquid Phase Oxidation of Benzyl Alcohol with Hydrogen Peroxide

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Figure S1. Contour plots showing variations between a pair of experimental variables (Table 1) on the predicted values of benzaldehyde yield while keeping other variable at a constant level of 0. Notations:

- $x_1$: catalyst amount,
- $x_2$: BzOH/H$_2$O$_2$ molar ratio,
- $x_3$: reaction time,
- $x_4$: water amount.
Figure S2. Similar to Figure S1, but showing 3D response surface plots between a pair of experimental variables (Table 1) on the predicted values of benzaldehyde yield while keeping other variable at a constant level of 0.
Figure S3. FTIR spectra of (a) fresh and (b) spent 20HPW/CeO$_2$ catalyst regenerated after six consecutive runs.