${Co(HBpe)_2}V_4O_{12}$: Pedal Motion Induced Order-Disorder P-1 \rightarrow C-1 Transition and Disrupted C-1 \rightarrow C2/m Displacive Transition due to Thermal Instability.

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SUPPORTING INFORMATION



Figure S1. Rietveld refinement Red points: Experimental data; Black line: Calculated, Green bars: Reflection positions, Blue line: Experimental-Calculated.





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Figure S3. TGA and ATD Curves.

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Figure S4. Thermodiffractometry experiment.

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Figure S5. Difference electron density maps of the two crystallographically independent HBpe molecules at 100K. Minimum electron density: -0.60 eÅ⁻³. Maximum electron density: 0.60 eÅ⁻³.



Figure S6. Comparison between the thermal evolution of the cell parameters on cooling (blue lines and points) and heating (red lines and points).



Figure S7. IR spectrum.



Figure S8. UV-spectrum.