

Supporting Information

N-Heterocycle Chelated Oxomolybdenum(VI and V) Complexes with Bidentate Citrate

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Experimental Section

Physical Measurements

Infrared spectra were recorded as Nujol mulls between KBr plates with a Nicolet 360 FT-IR spectrometer. Electronic spectra in solution were recorded on a UV 2501 spectrophotometer. Elemental analyses were performed with an EA 1110 elemental analyzer. ¹H and ¹³C NMR spectra were recorded in DMSO on a Bruker 400 NMR spectrometer using DSS (sodium 2,2-dimethyl-2-silapentane-5-sulfonate) as the internal reference.

Figure Options

- Figure S1 UV-Vis spectra of $[(\text{MoO}_2)_2\text{O}(\text{H}_2\text{cit})(\text{phen})(\text{H}_2\text{O})_2]\cdot\text{H}_2\text{O}$ (**1**) and $[(\text{MoO})_2\text{O}(\text{H}_2\text{cit})_2(\text{bpy})_2]\cdot 4\text{H}_2\text{O}$ (**2**) in DMSO solution
- Figure S2 IR spectra of $[(\text{MoO}_2)_2\text{O}(\text{H}_2\text{cit})(\text{phen})(\text{H}_2\text{O})_2]\cdot\text{H}_2\text{O}$ (**1**) and $[(\text{MoO})_2\text{O}(\text{H}_2\text{cit})_2(\text{bpy})_2]\cdot 4\text{H}_2\text{O}$ (**2**)
- Figure S3 IR spectra of $[\text{MoO}_2(\text{H}_2\text{cit})(\text{bpy})]\cdot\text{H}_2\text{O}$ (**6**)
- Figure S4 Calculated and experimental X-ray diffractogram of $[(\text{MoO}_2)_2\text{O}(\text{H}_2\text{cit})(\text{phen})(\text{H}_2\text{O})_2]\cdot\text{H}_2\text{O}$ (**1**).
- Figure S5 The ^{13}C NMR data of the solution of sodium molybdate(VI) and citric acid with the molar ratio Mo: cit = 1:1 at various pH values in equilibrium. * denotes dimeric molybdenum citrate, \circ denotes monomeric molybdenum citrate, x denotes free citrate.

Figure S1

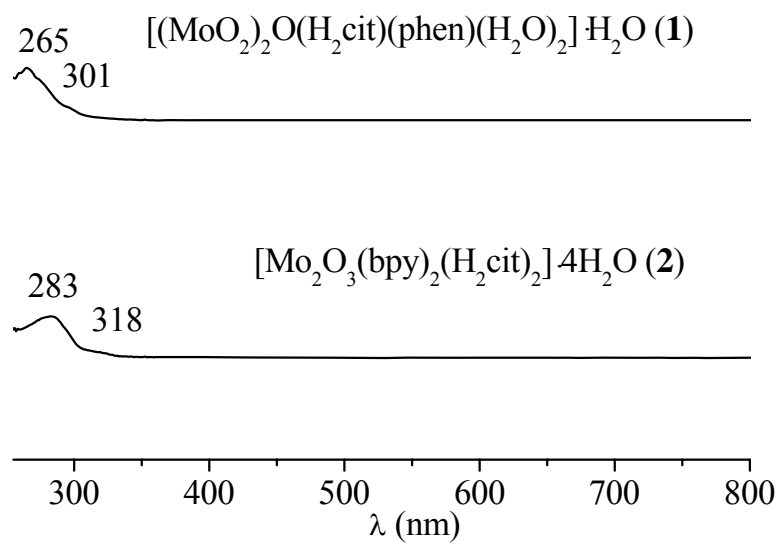


Figure S2

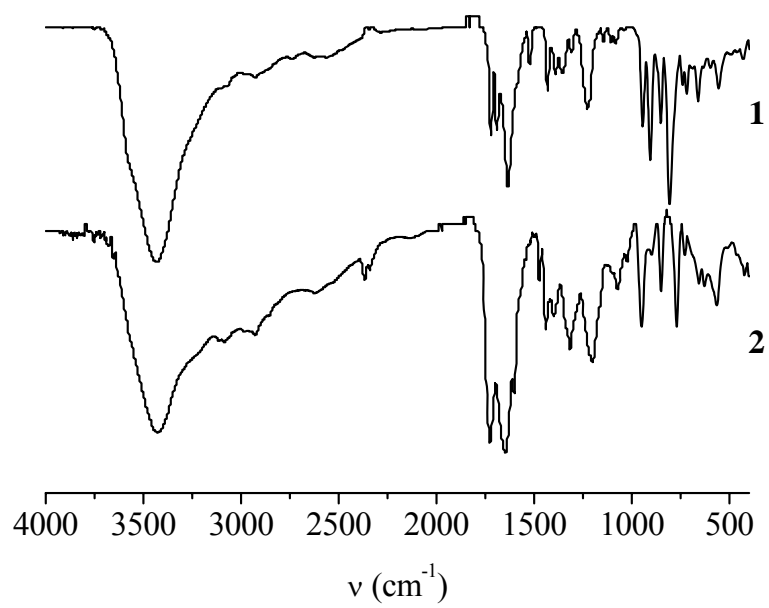


Figure S3

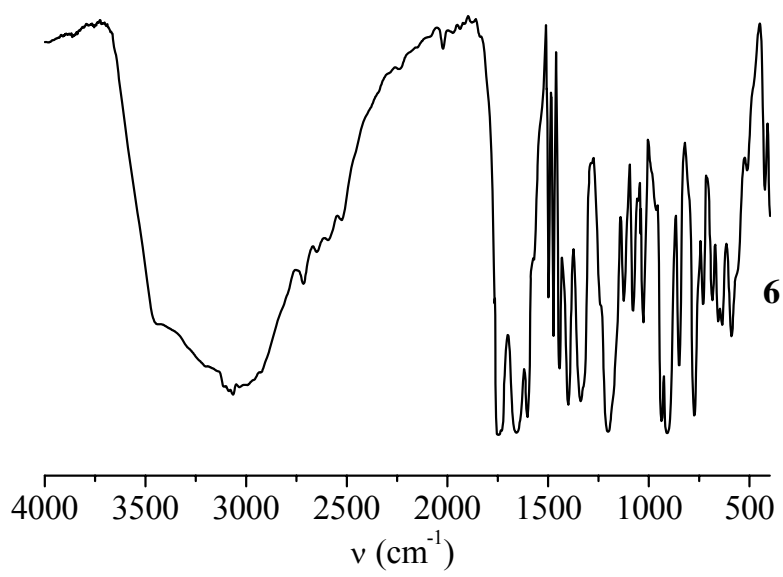


Figure S4

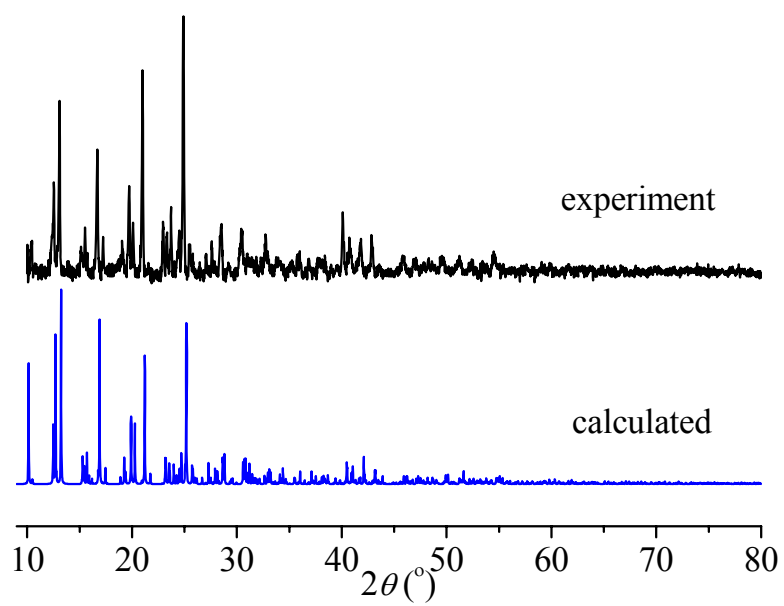


Figure S5

