Electronic Supporting Information (ESI)

Assembly of unusual Zn-cluster compounds based on pyridinealcohol platforms

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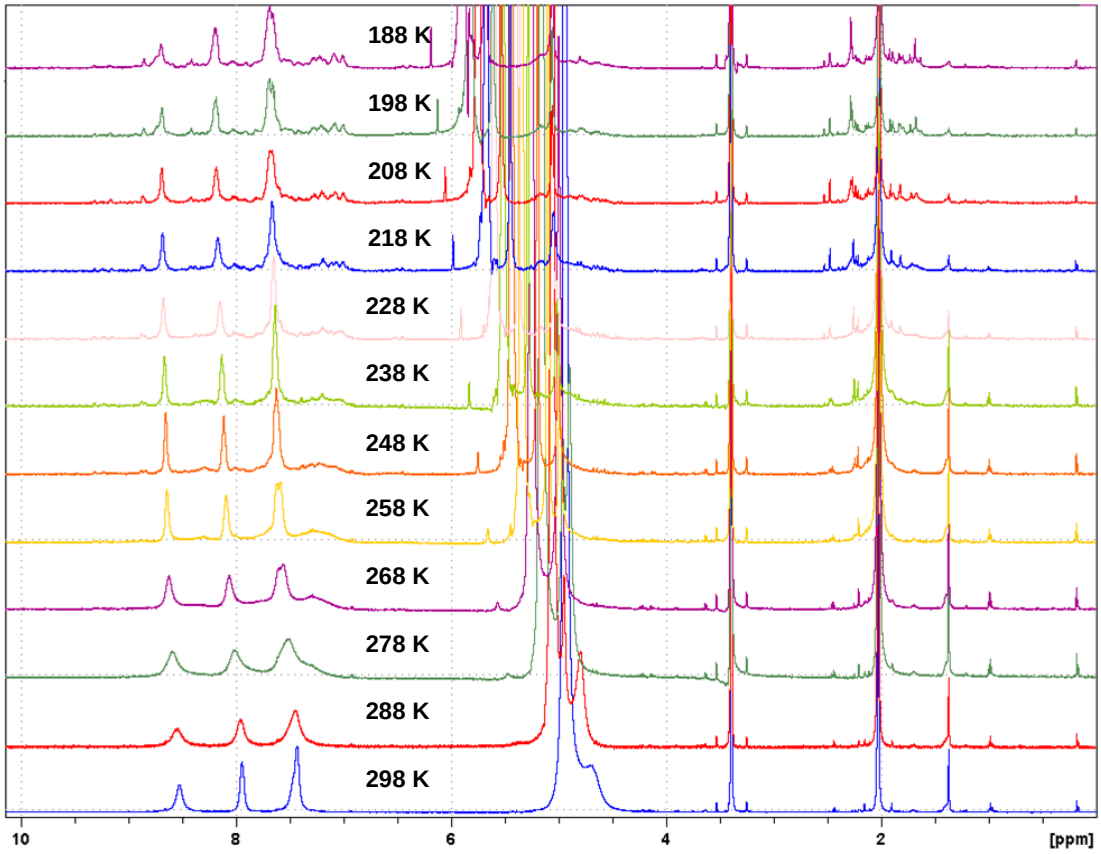
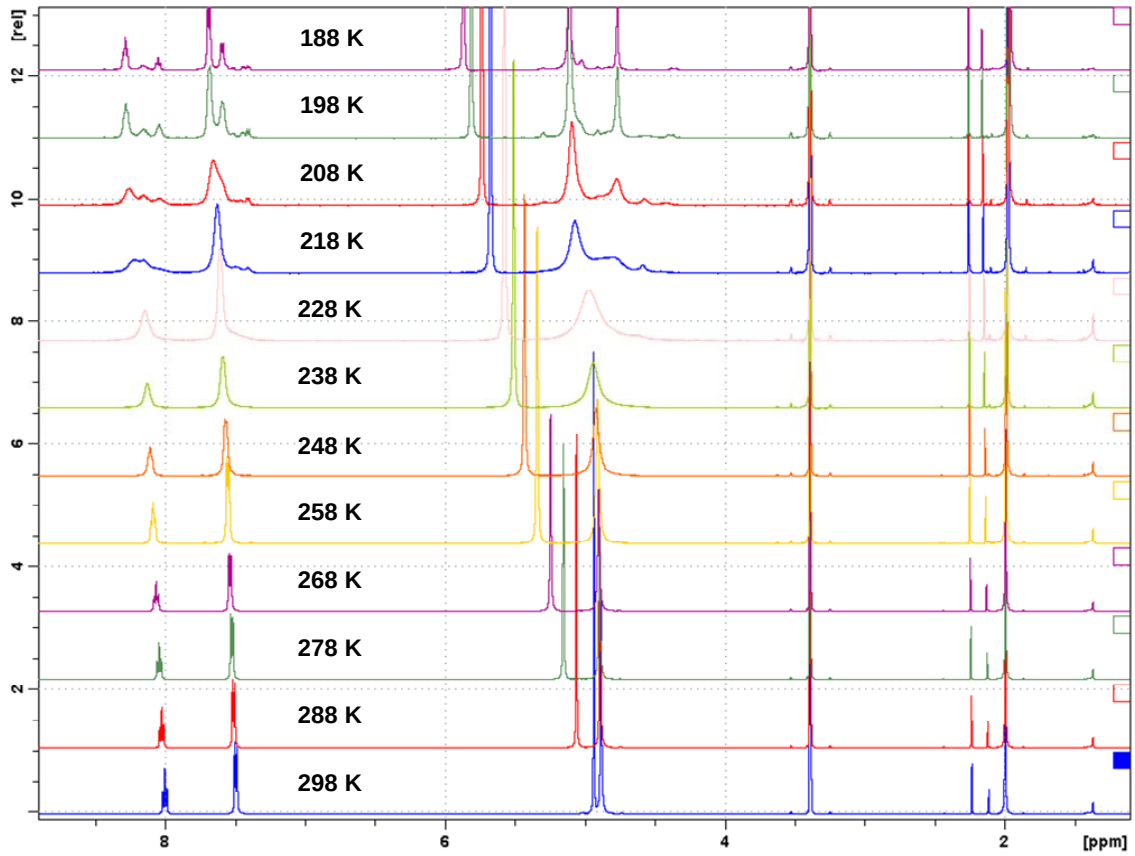
Contents:

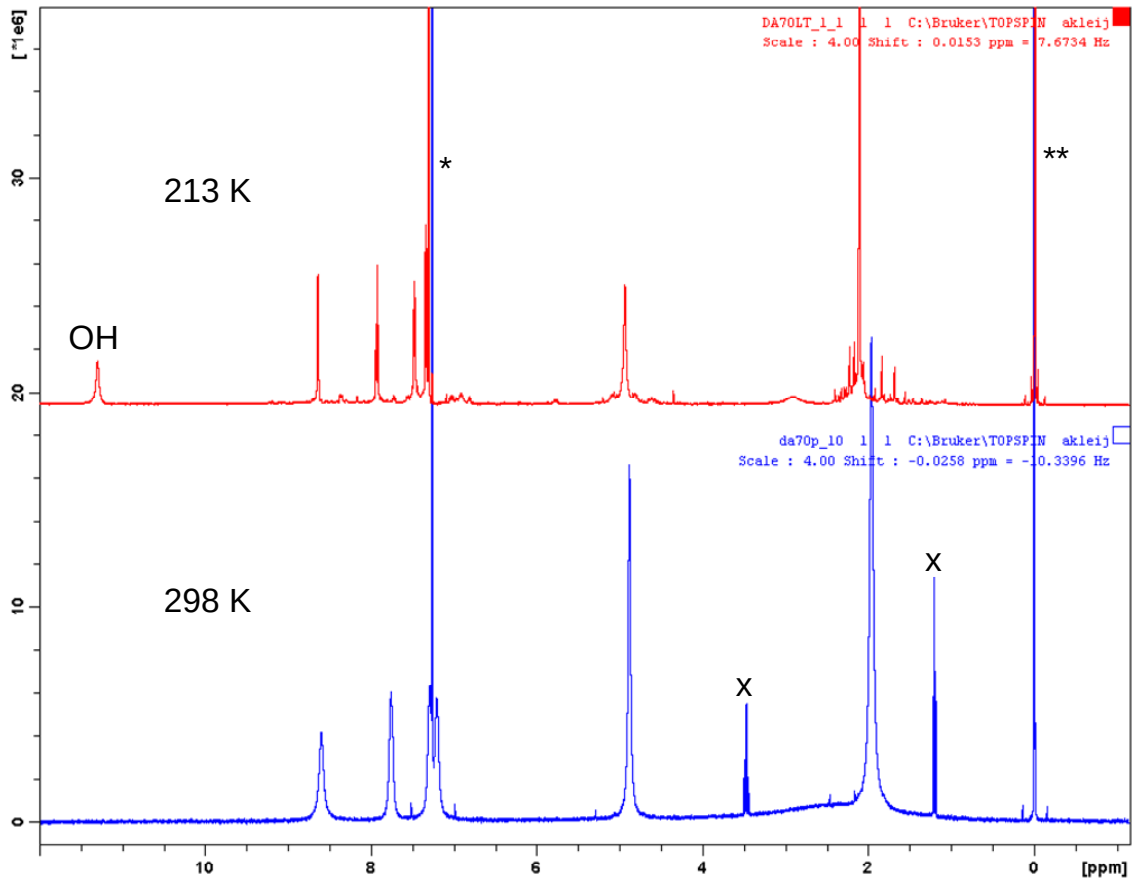
Variable temperature NMR spectra for complex **5** in d_4-MeOH.



Variable temperature NMR spectra for complex **7** in d_4-MeOH.



Variable temperature NMR spectra for complex **5** in $CDCl_3$.



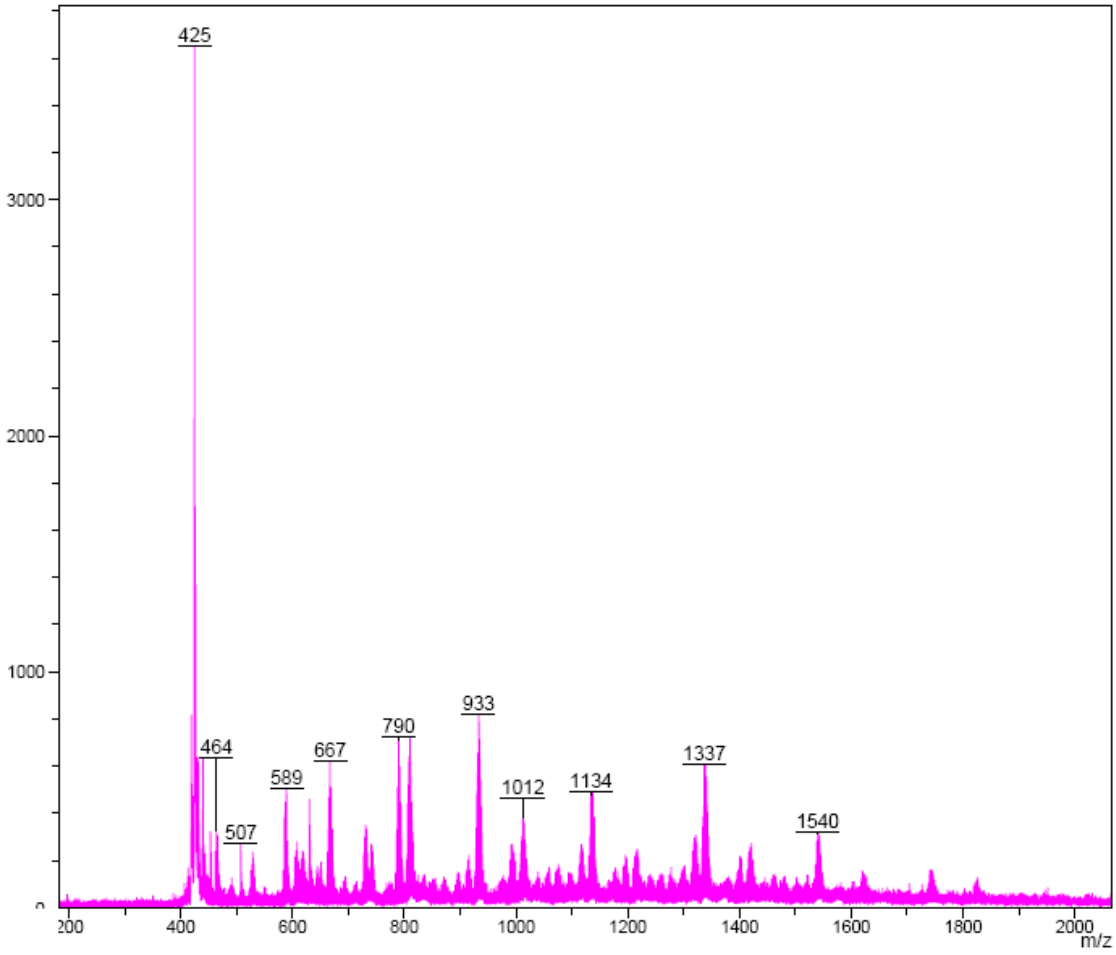
* Solvent residual peak

** TMS

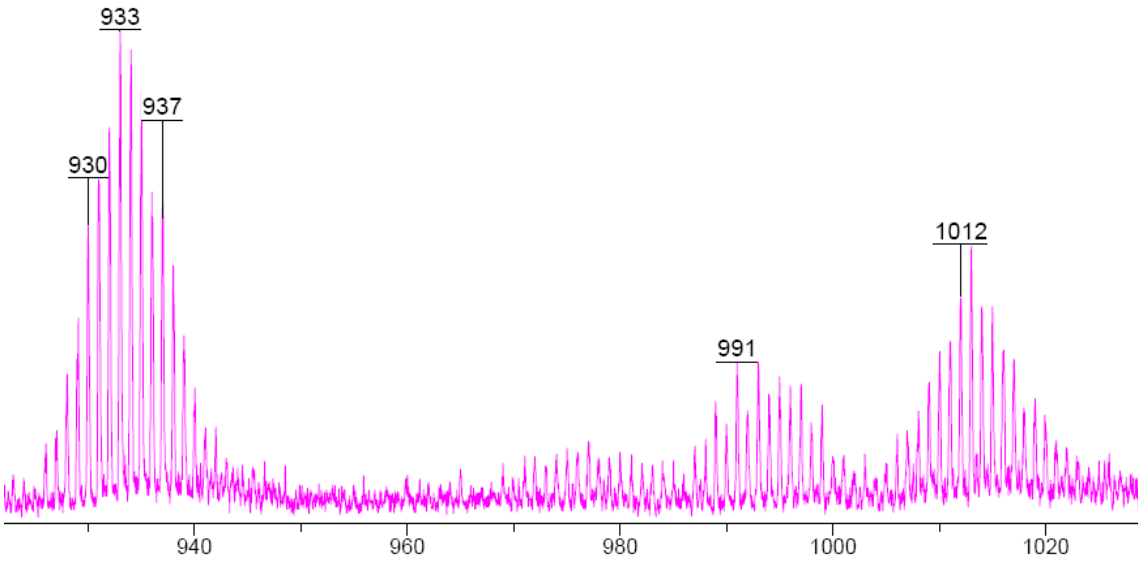
X Diethyl ether impurity.

Mass spectrometric data for complex **7**.

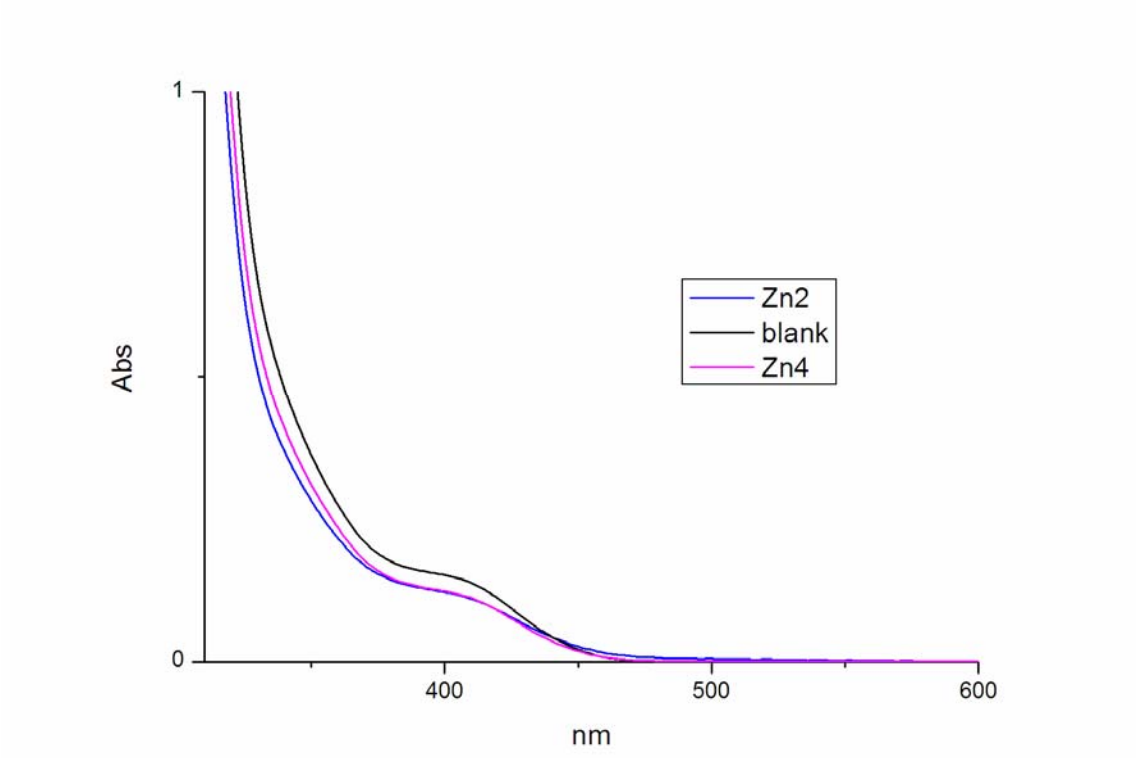
Full mass spectrum for compound **7**.



Selected region of mass spectrum of **7**:



UV-vis analysis of attempted phosphoester cleavage reactions.



General conditions:	**Blank reaction:**
TRIS = 0.01 M	9 ml H_2O/MeCN 1:1
$NaClO_4 \cdot xH_2O$ = 0.09 M	11.3 mg of TRIS (0.093 mmol , 0.01 M)
Dinuclear complex = 0.25 mM	108.3 mg of $NaClO_4$ (0.77 mmol, 0.085 M)
Tetranuclear complex = 0.125 mM	2.5 mg of paraoxon 0.009 mmol (1mM)
Paraoxon = 0.82 mM	
Solvent = H_2O/MeCN 1:1	
3.0 mL in quartz cuvette for UV-vis	
Zn_2 hydrolysis:	**Zn_4 hydrolysis**
9 ml H_2O/MeCN 1:1	9 ml H_2O/MeCN 1:1
1.2 mg of Zn_2 , 0.0022 mmol, 0.25 mM	1.4 mg of Zn_4 , 0.0013 mmol, 0.148 mM
10.8 mg of TRIS , 0.089 mmol, 0.009 M	10.7 mg of TRIS, 0.088 mmol, 0.01 M
108.7 mg of $NaClO_4$, 0.77 mmol, 0.086 M	114.6 mg of $NaClO_4$, 0.81 mmol, 0.09 M
2.2 mg of paraoxon, 0.008mmol, 0.88 mM	2.3 mg of paraoxon, 0.008 mmol, 0.92 mM