Supporting Information
for

On zinc(II) coordination chemistry with furosemide: a journey from mononuclear complex to coordination polymer

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1. Thermal analysis

Figure S1. TG-DSC curves for **1**.

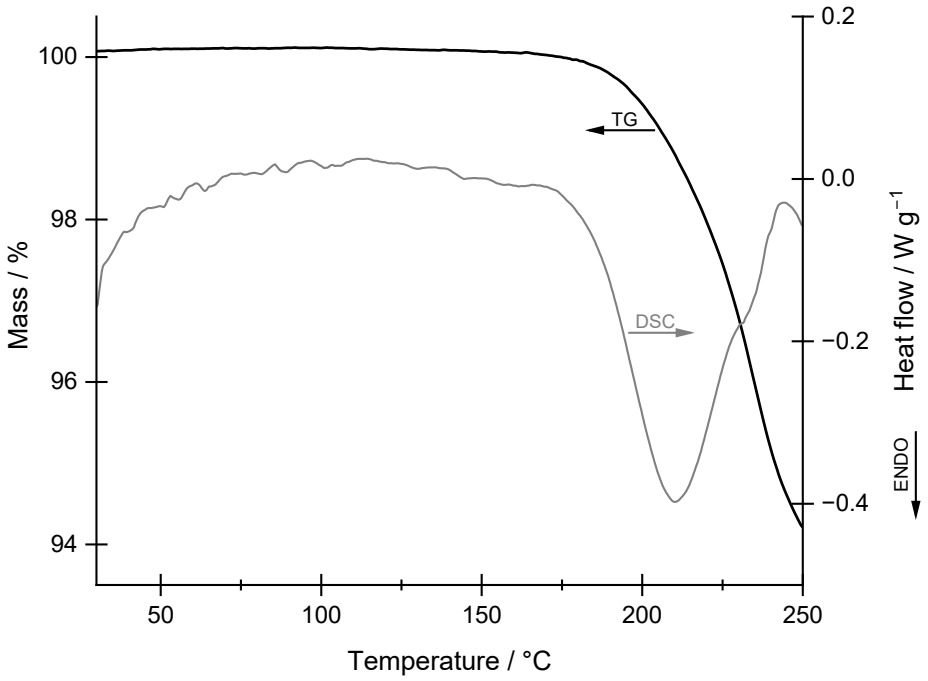
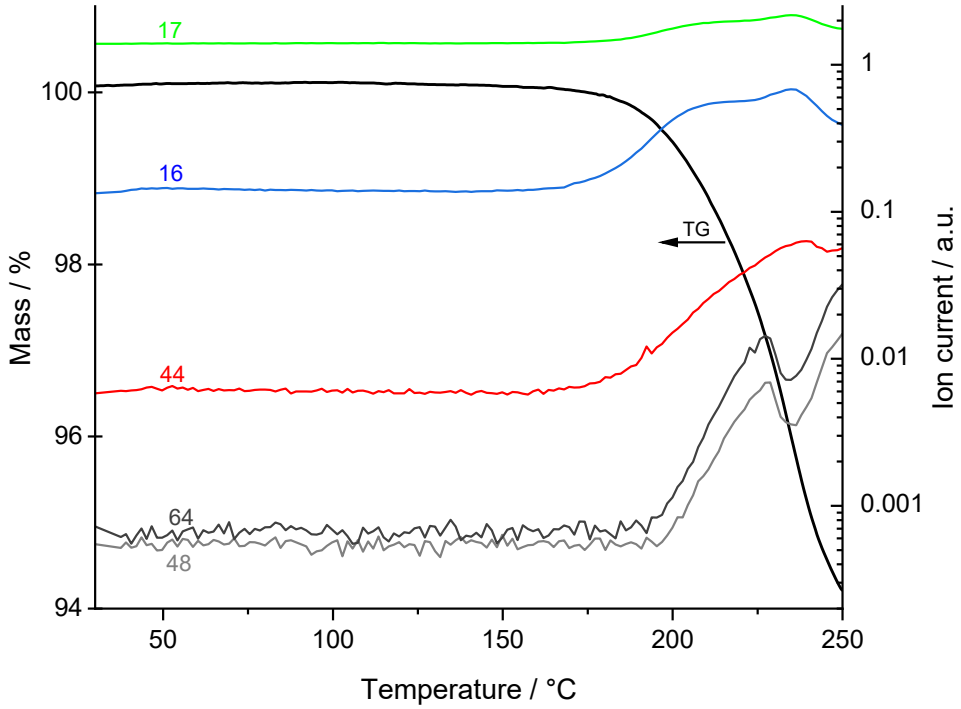


Figure S2. TG-MS curves for **1**.



2. X-ray structure determinations

Figure S3. Supramolecular layers in $[Zn(NH_3)_2(fur)_2]$ (**1**) stack along *c*-axis. A view of the structure along the layers.

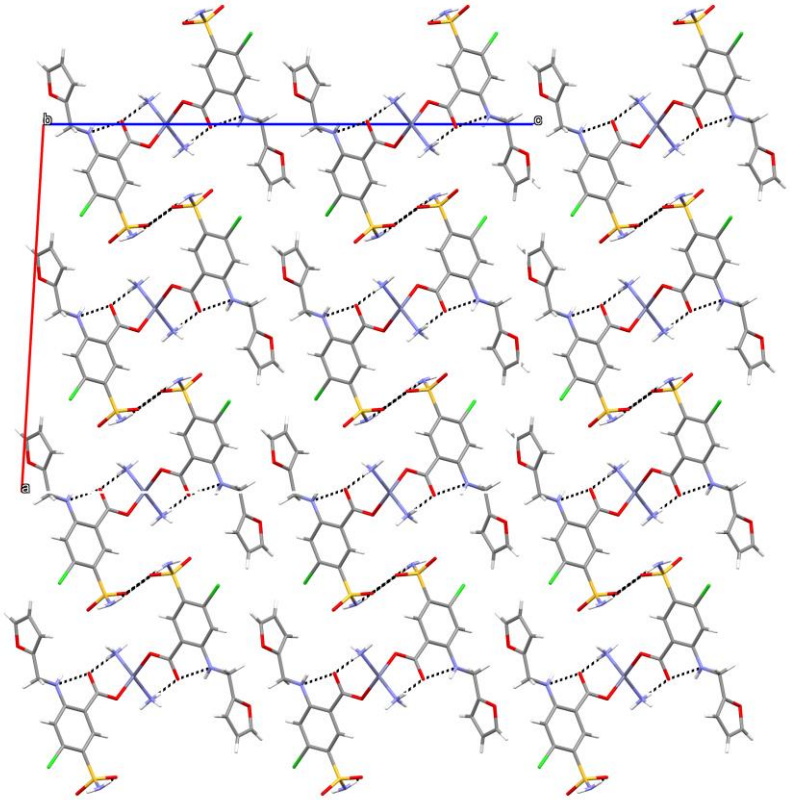
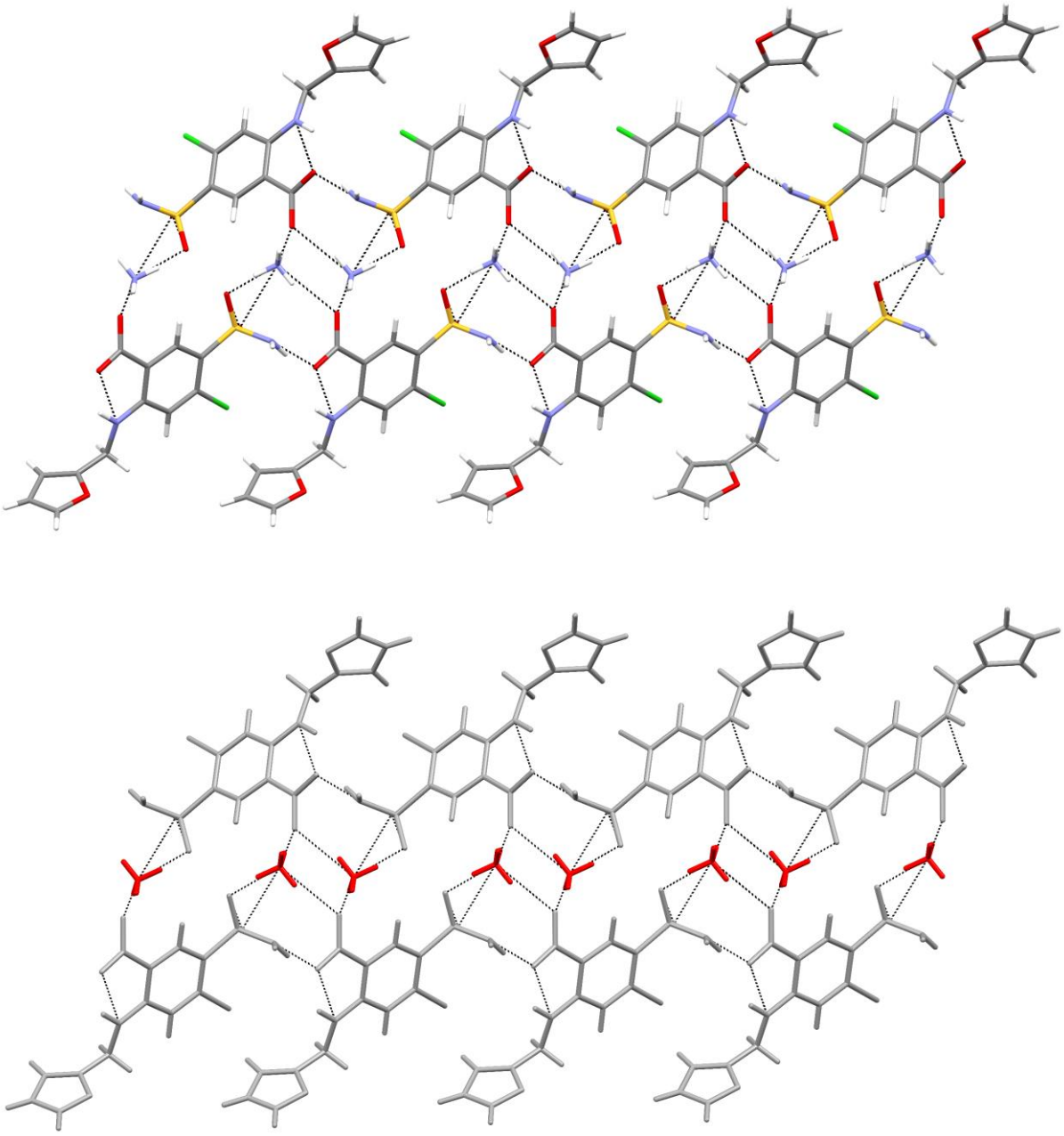


Figure S4. Hydrogen bonds in NH_4fur (**2**) link ammonium cations and furosemide anions into supramolecular 2D-network (top). The bottom figure shows the same section of this network with the furosemide anions colored grey and the ammonium cations in red. The drawing shows that two furosemide layers are linked with (a layer of) ammonium cations. The views in both drawings are along the layers.



3. Infrared spectroscopy

Figure S5. Infrared spectrum of $[Zn(NH_3)_2(fur)_2]$ (**1**).

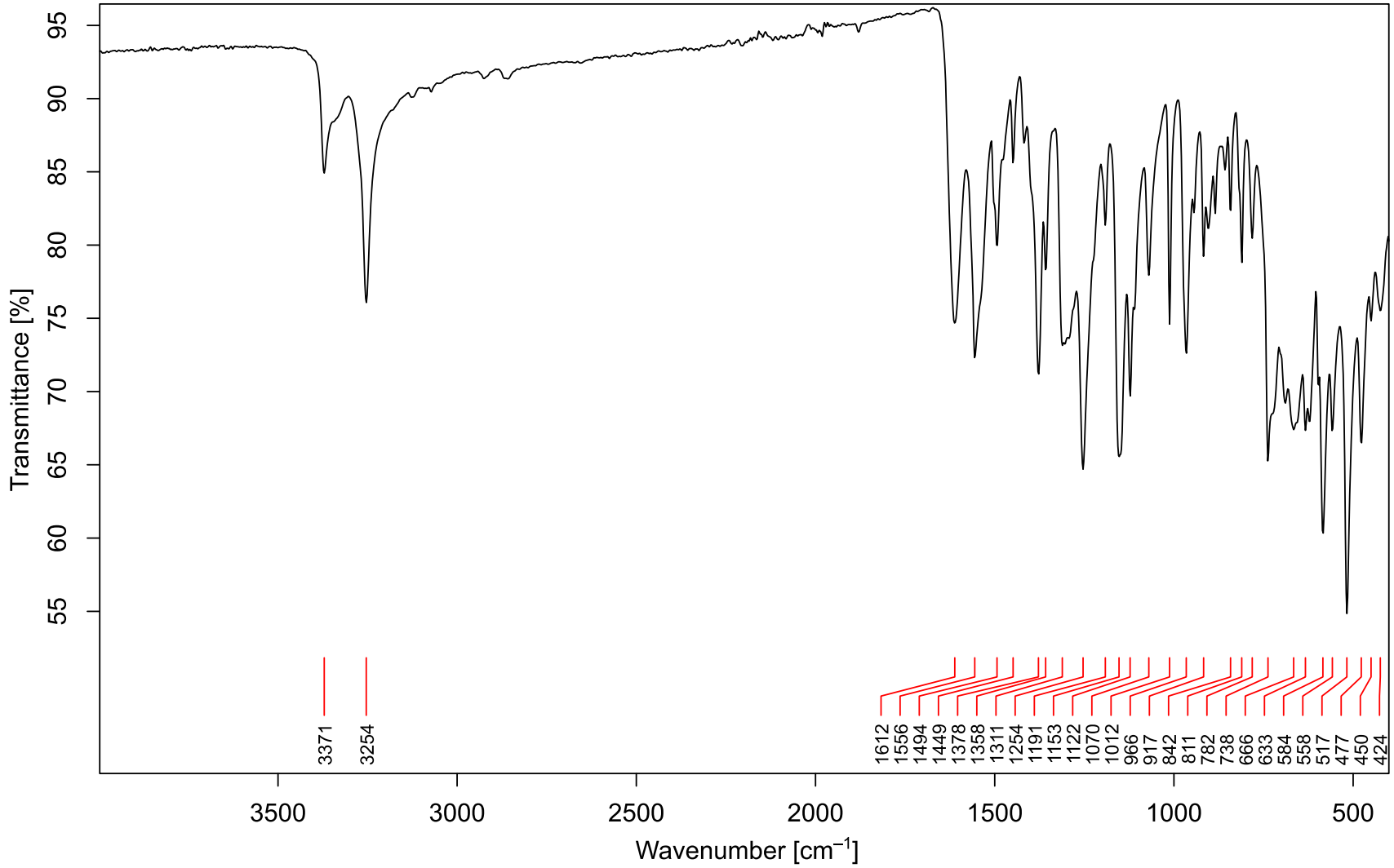


Figure S6. Infrared spectrum of NH_4fur (**2**).

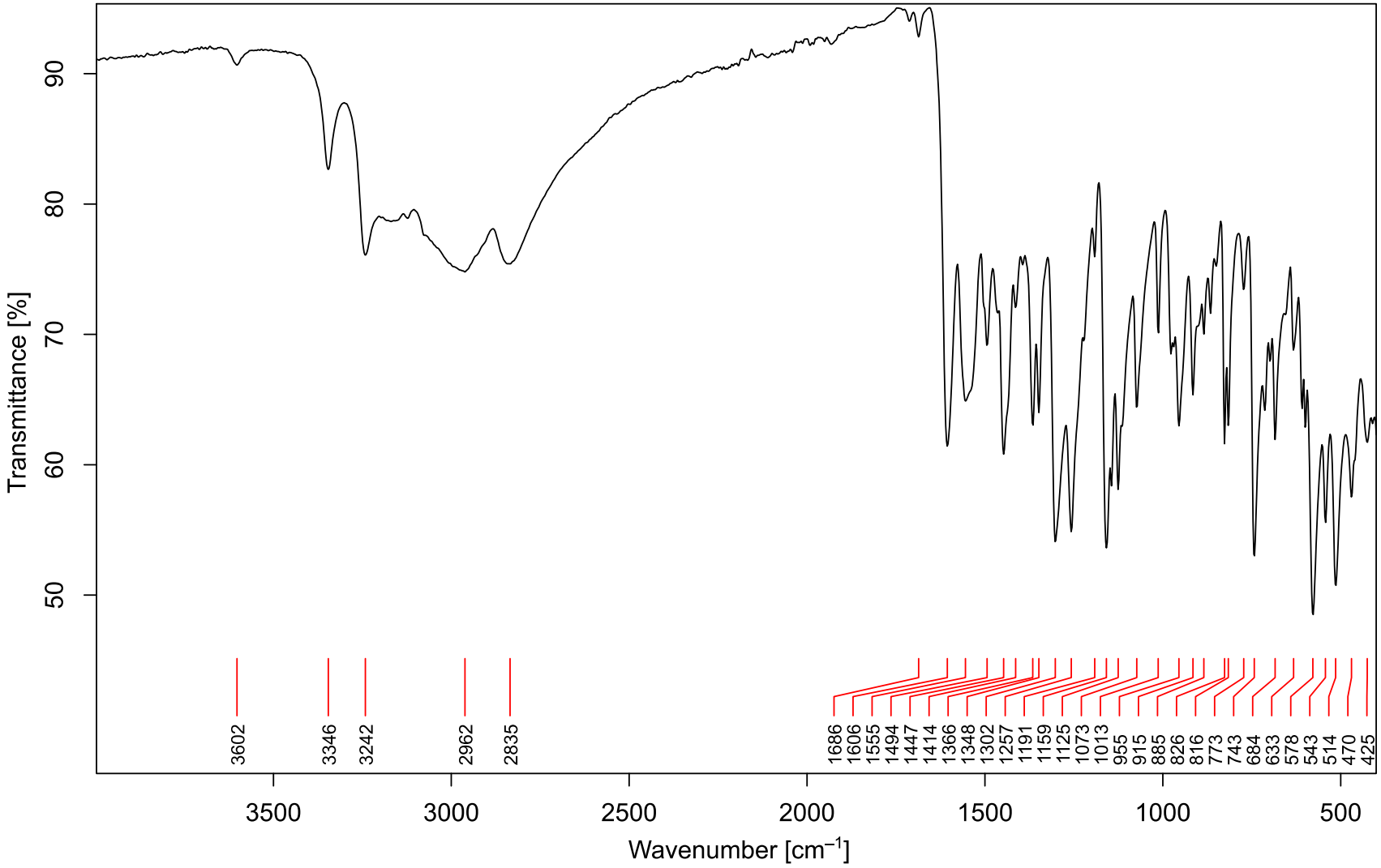
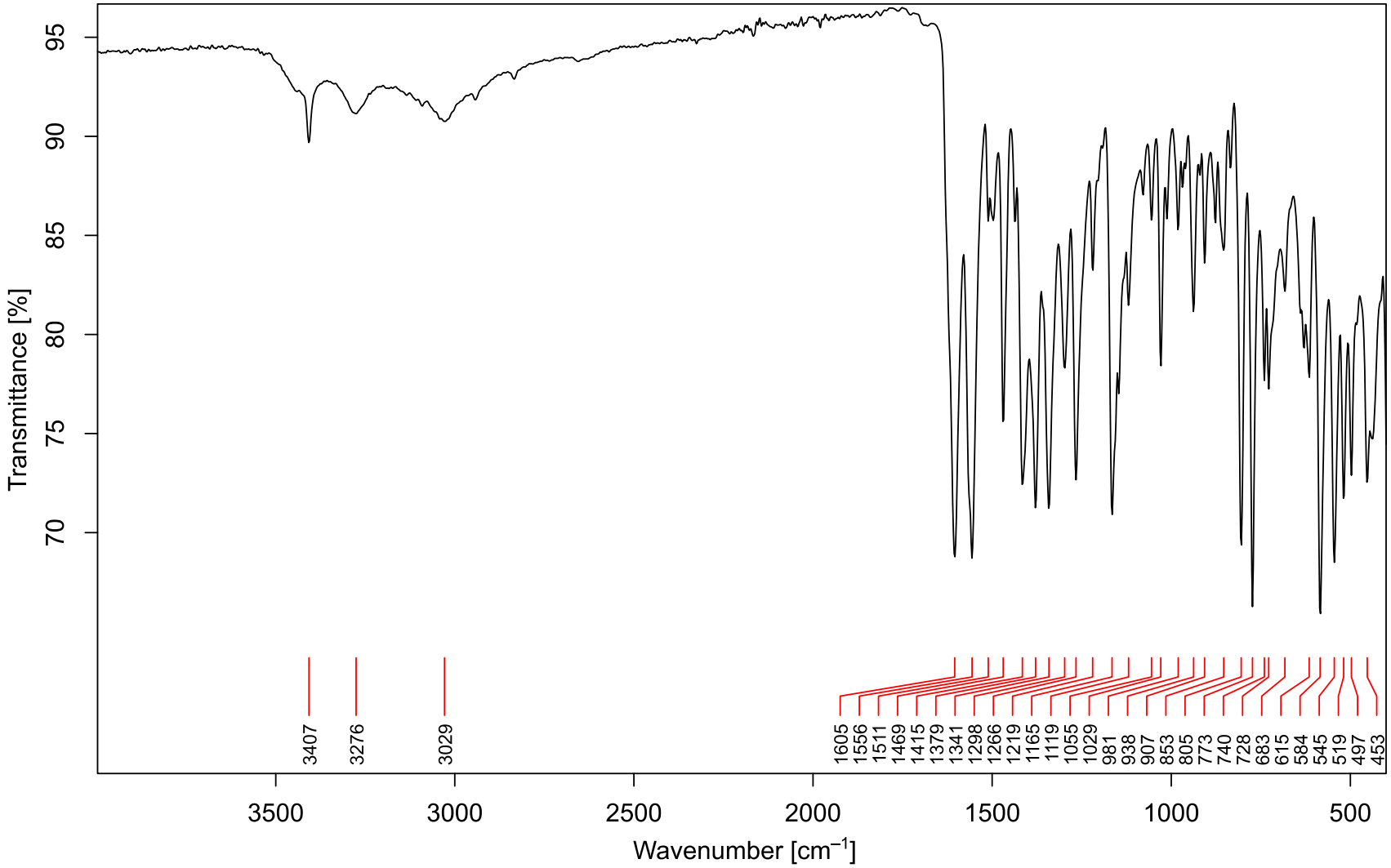


Figure S7. Infrared spectrum of $[Zn_3(quin)_4(fur)_2]_n \cdot 2n CH_3OH$ (**3**).



4. ^{1}H NMR spectroscopy

Figure S8. ^{1}H NMR spectrum of $[Zn(NH_3)_2(fur)_2]$ (**1**) in DMSO-d_6.

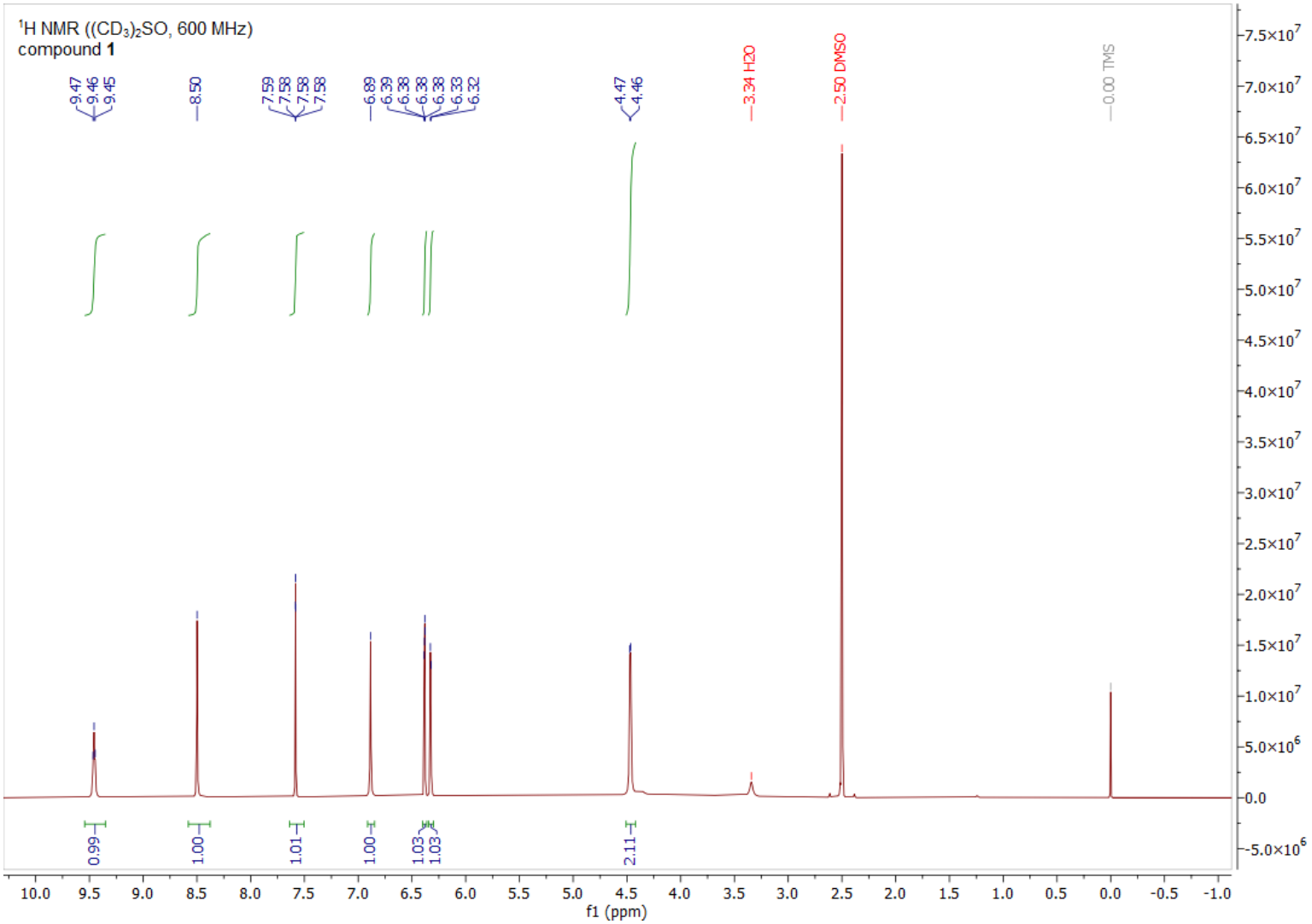


Figure S9. ^{1}H NMR spectrum of $[Zn_3(quin)_4(fur)_2]_n \cdot 2n CH_3OH$ (**3**) in DMSO-d_6.