

Supporting Information

Study of DNA interaction and cytotoxicity activity of oxidovanadium(V) complexes having ONO donor Schiff base ligands

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Figure S1. IR spectra of H₂L (a) and complex 1

Figure S2. ¹H NMR of H₂L in DMSO-d₆

Figure S3-S5. ¹H, ¹³C, and ⁵¹V NMR spectra of 1 DMSO-d₆

Figure S6-S7. ¹H and ⁵¹V NMR of 2 in DMSO-d₆

Figure S8-S9. ESI-MS of 1 and 2

Figure S10. Molecular structures of independent complex anion and cation showing atom labelling

Figure S11. A view in projection down the b-axis of the unit-cell contents for salt 1

Table S1. Geometric parameters (Å, °) characterizing identified intermolecular contacts in salt 1

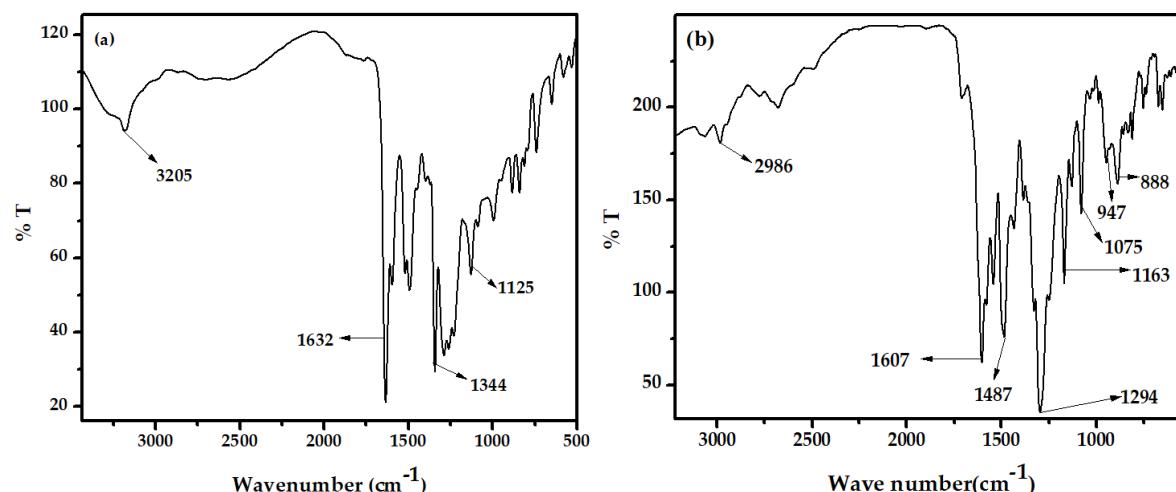


Figure S1. IR spectra of H₂L (a) and complex 1 (b)

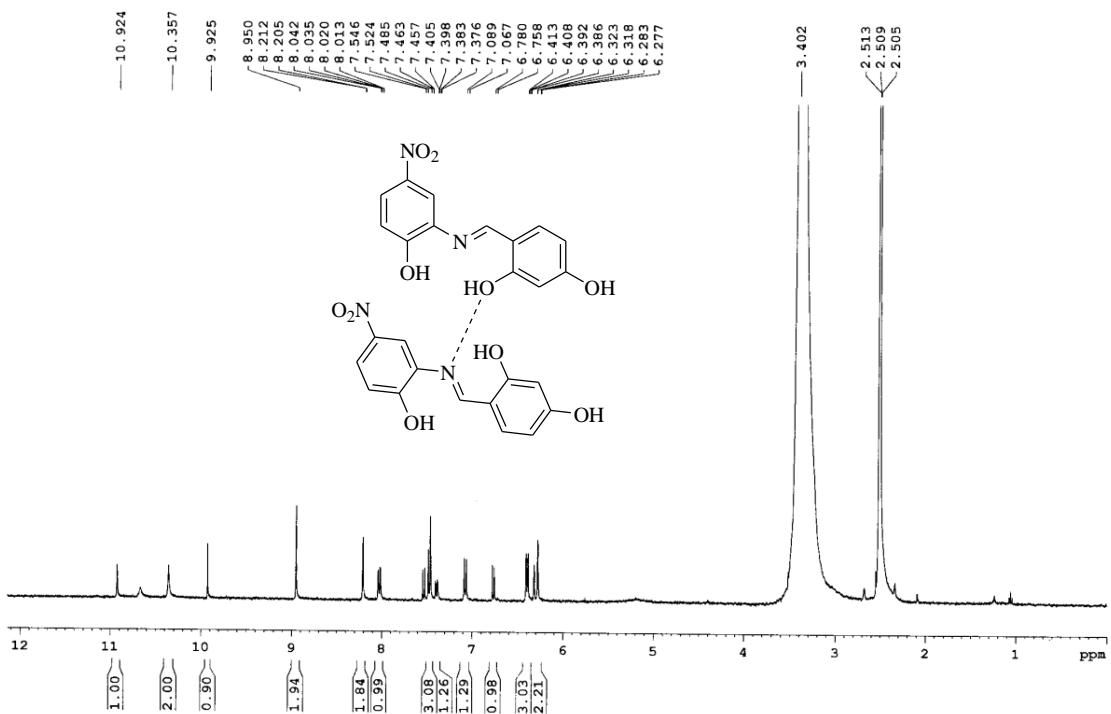


Figure S2. ^1H NMR of H_2L ligand in DMSO-d_6 .

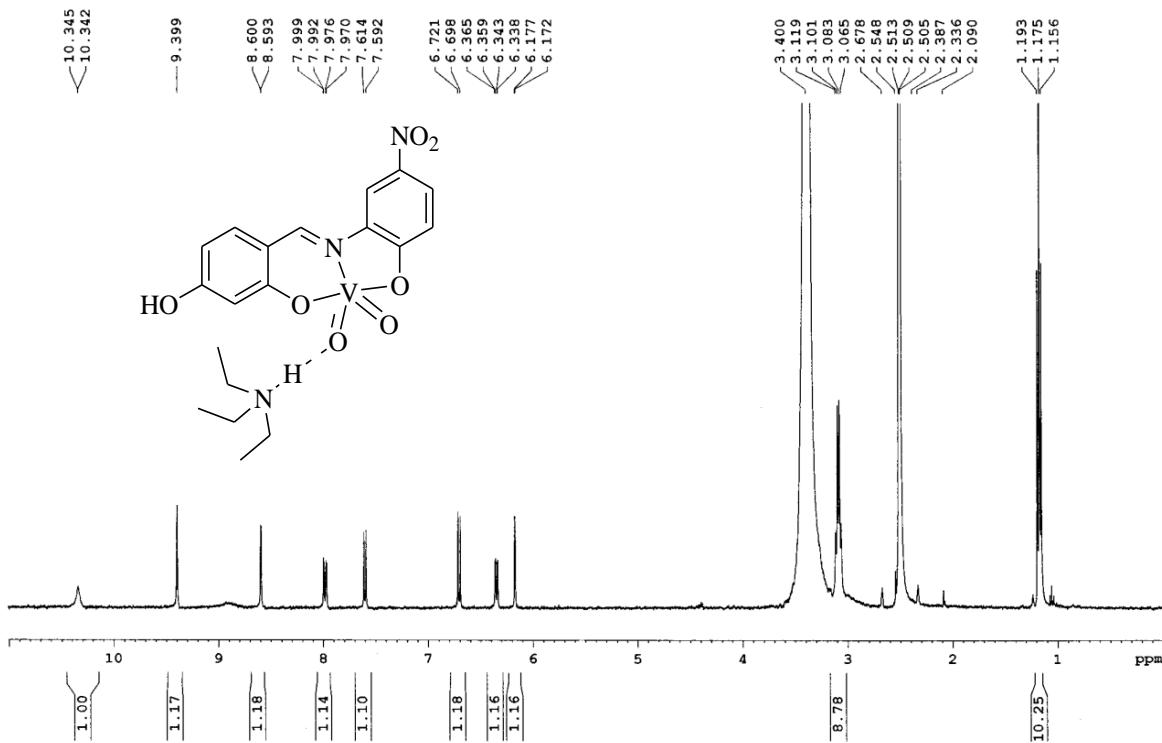


Figure S3. ^1H NMR spectra of **1** DMSO-d_6

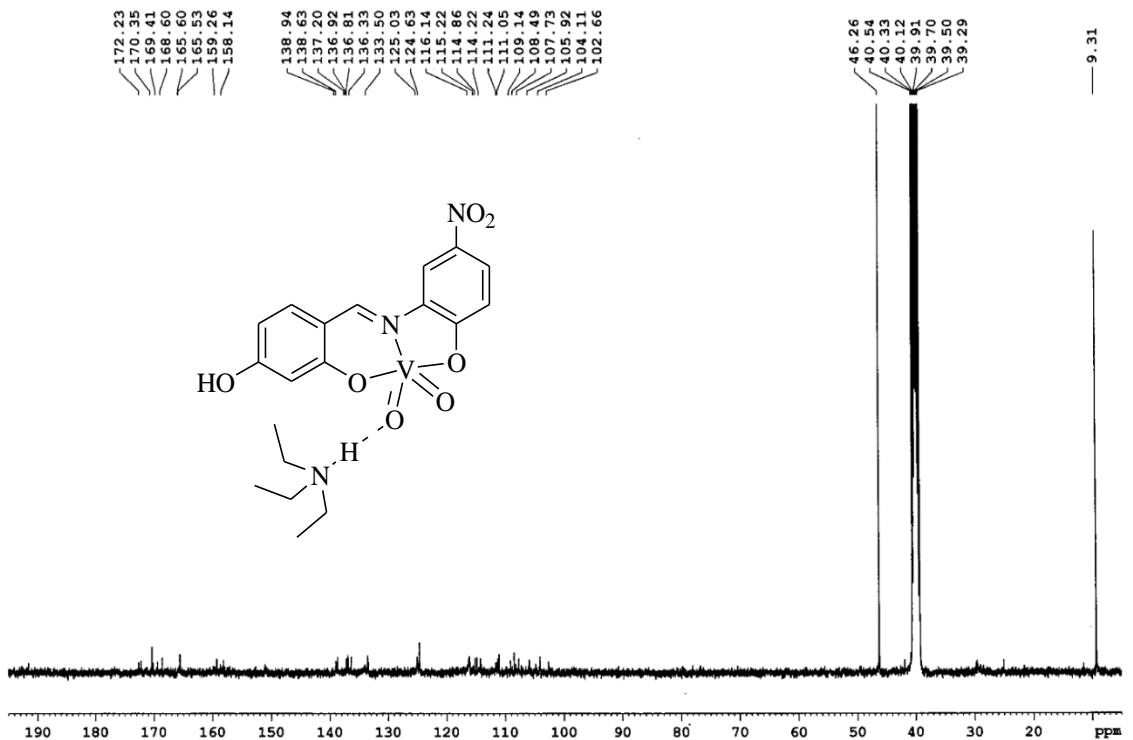


Figure S4. ^{13}C NMR spectra of 1 DMSO-d₆

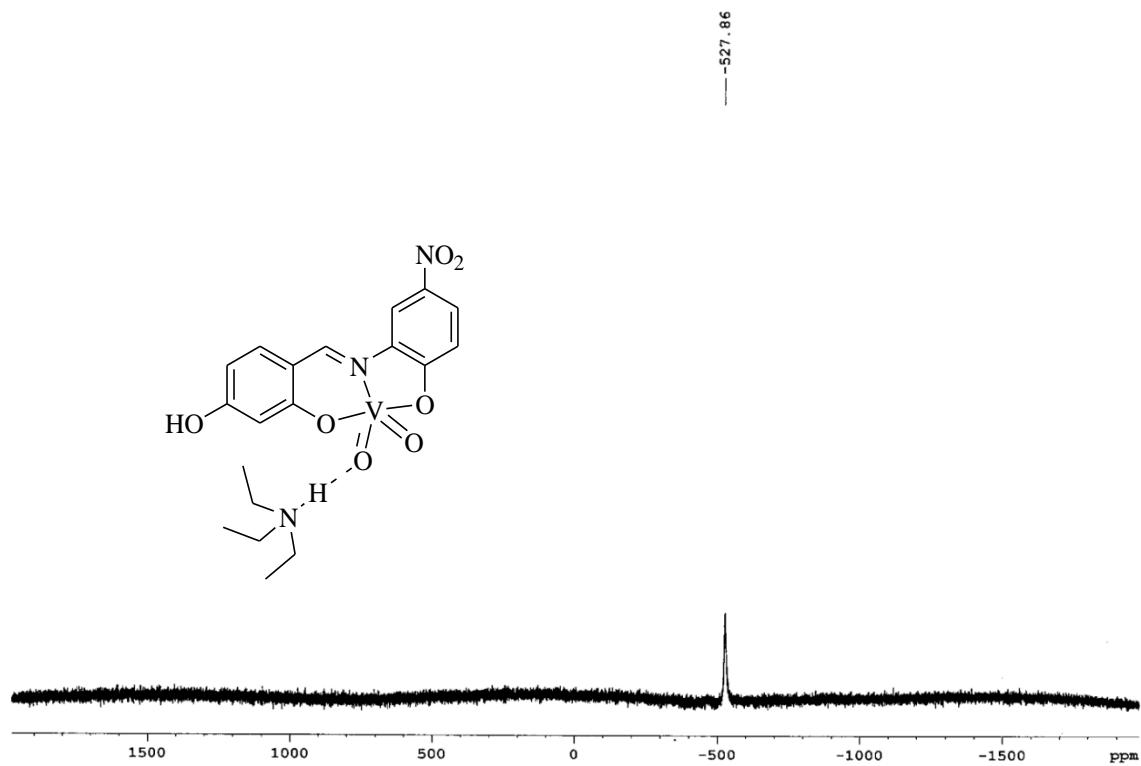


Figure S5. ^{51}V NMR spectra of 1 DMSO-d₆

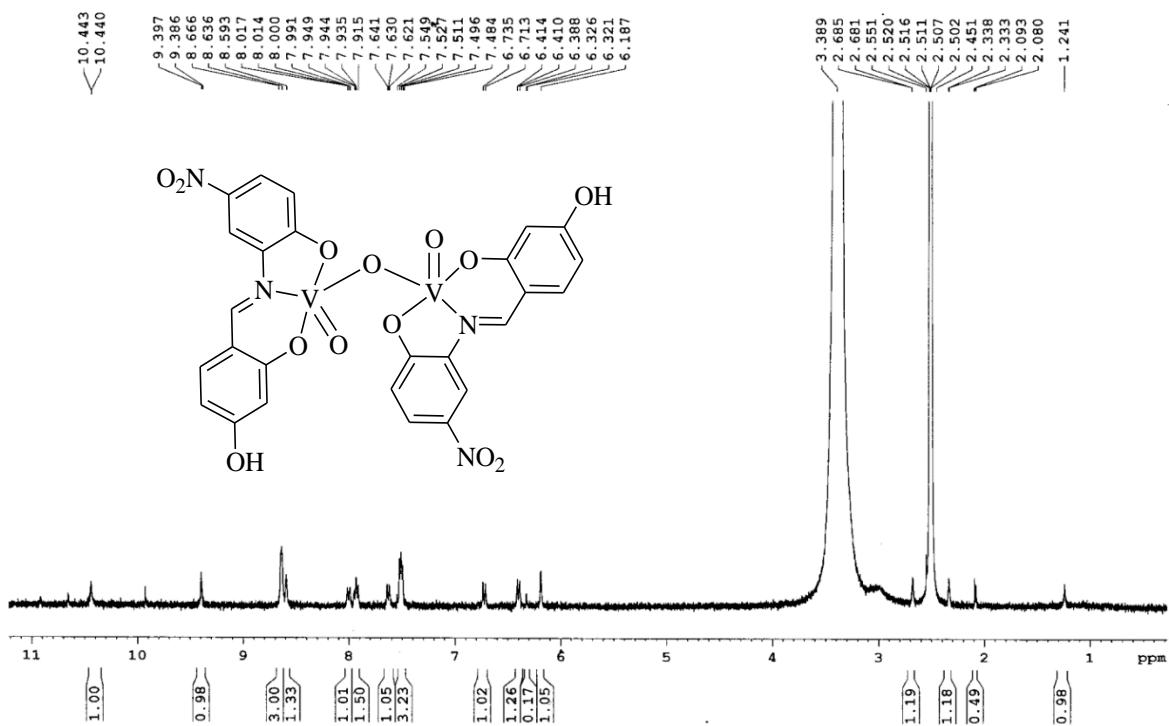


Figure S6. ^1H NMR spectra of **2** DMSO-d₆

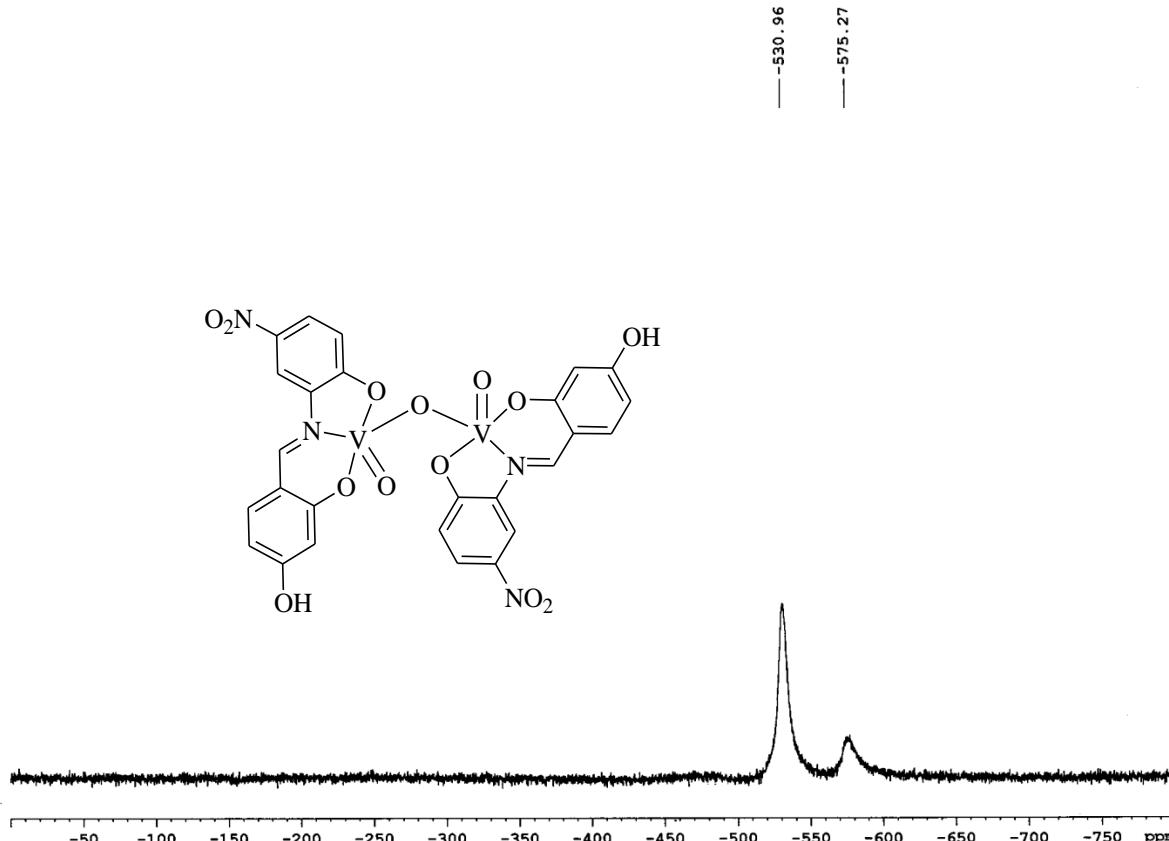


Figure S7. ^{51}V NMR spectra of **2** DMSO-d₆

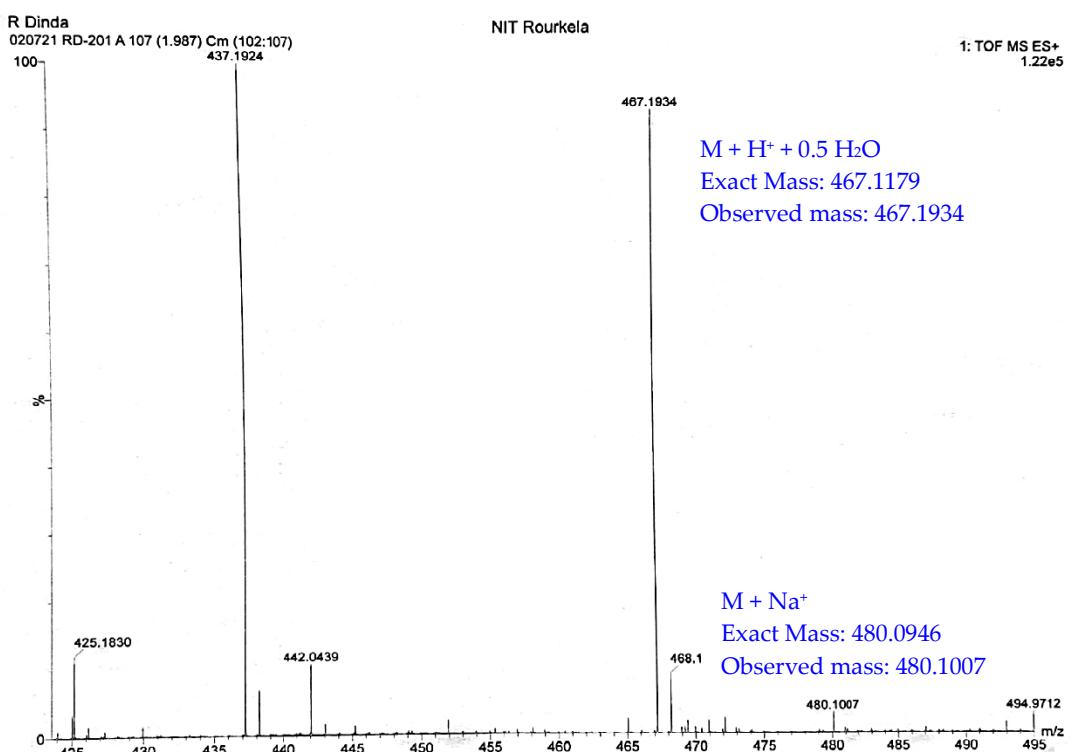


Figure S8. ESI-MS of **1** (100 pmol/ μ L) in MeCN (recorded in the positive ion mode).

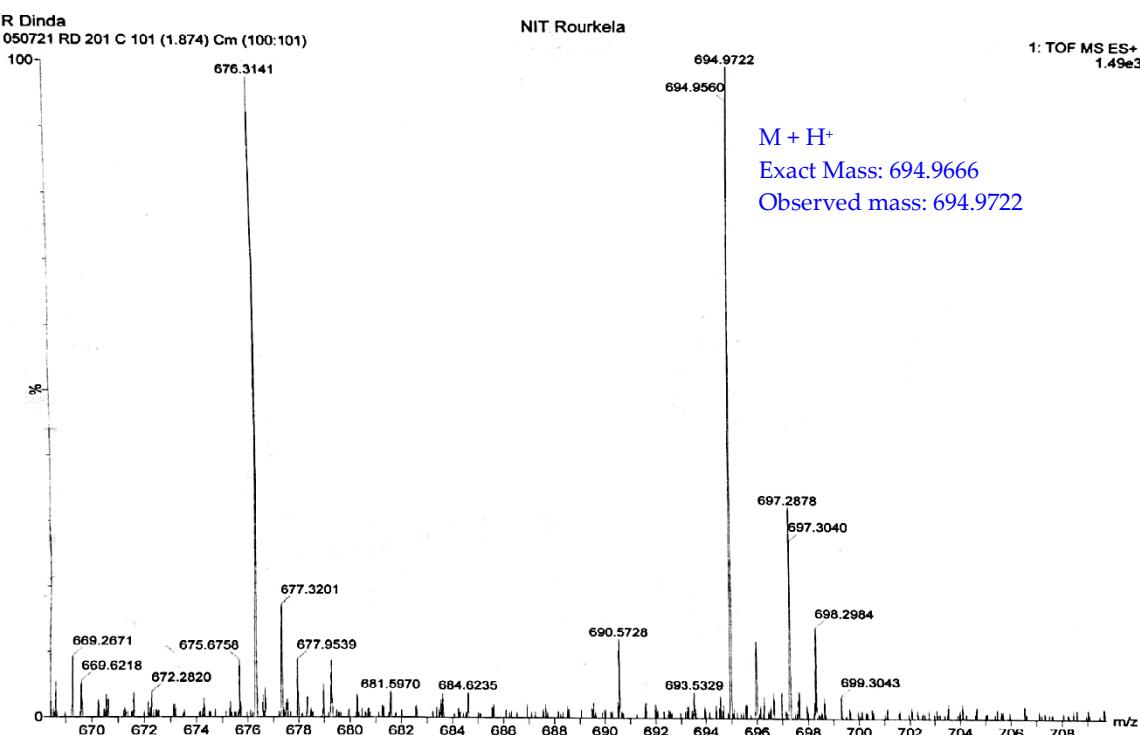


Figure S9. ESI-MS of **2** (100 pmol/ μ L) in MeCN (recorded in the positive ion mode).

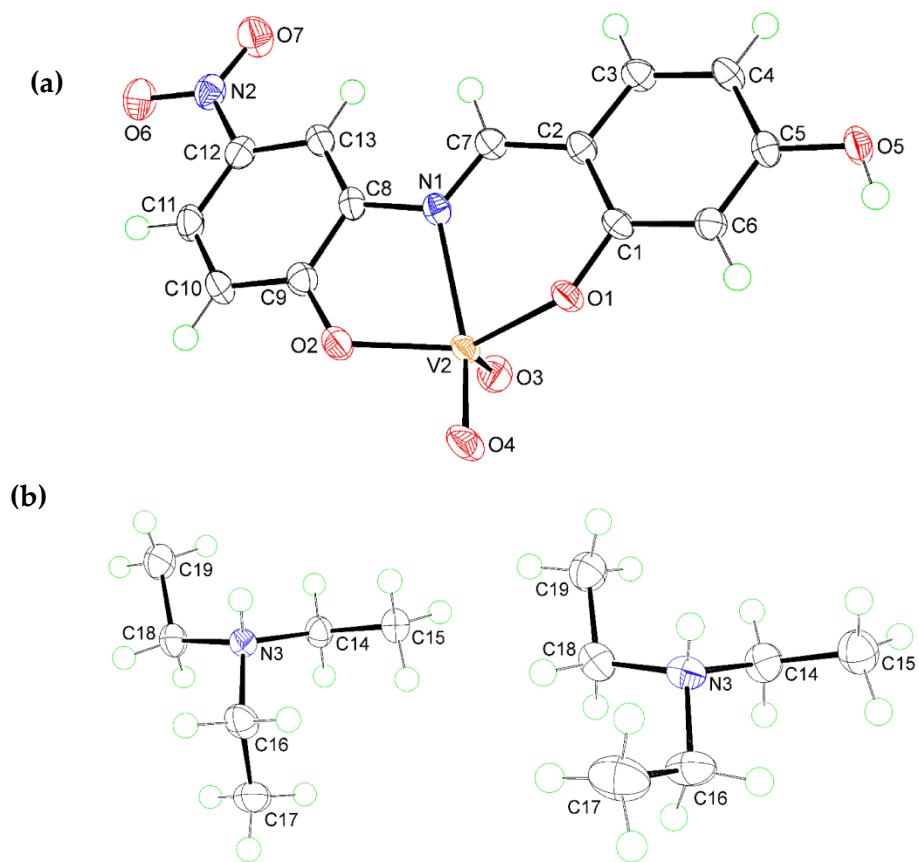


Figure S10. Molecular structures of (a) the second independent complex anion and (b) the two independent cations of salt **1** showing atom labelling scheme and displacement ellipsoids at the 70% probability level.

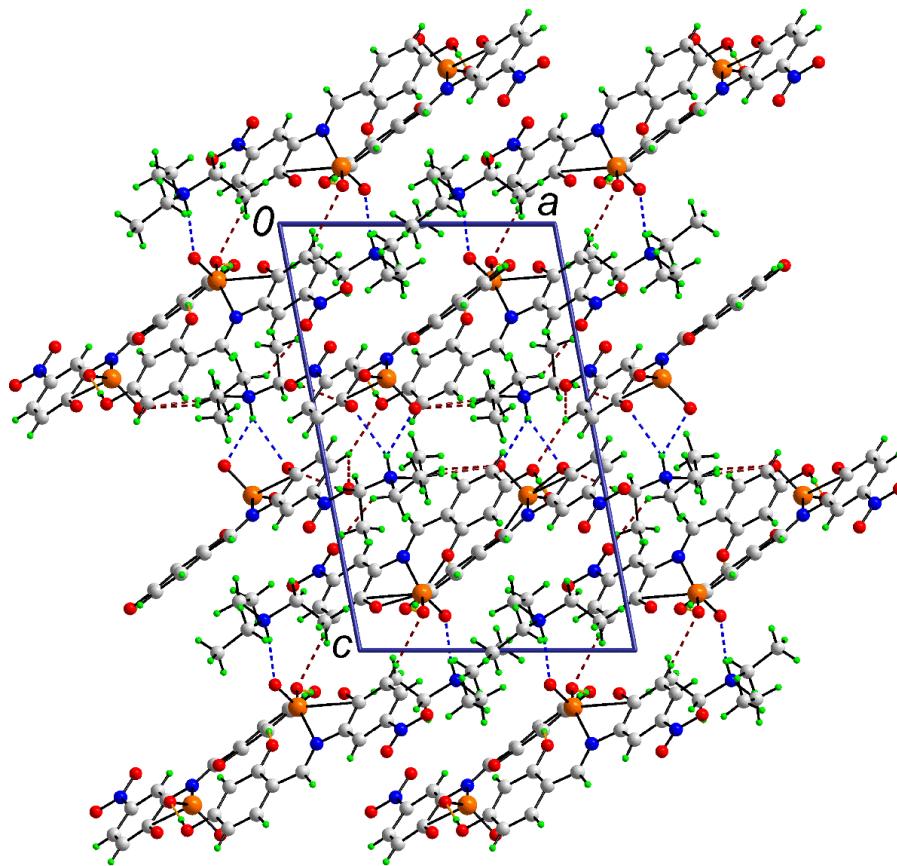


Figure S11. A view in projection down the b -axis of the unit-cell contents for salt **1**. The $\text{O}-\text{H}\cdots\text{O}$, $\text{N}-\text{H}\cdots\text{O}$ and $\text{C}-\text{H}\cdots\text{O}$ interactions are indicated by orange, blue and brown dashed lines, respectively.

Table S1. Geometric parameters (\AA , $^\circ$) characterizing identified intermolecular contacts in salt **1**

| A operation | H | B | $\text{H}\cdots\text{B}$ | $\text{A}\cdots\text{B}$ | $\text{A}-\text{H}\cdots\text{B}$ | symmetry |
|----------------|------|-----|--------------------------|--------------------------|-----------------------------------|-----------------|
| C6a | H6a | O1b | 2.48 | 3.4151(16) | 170 | x, y, z |
| C6b | H6b | O1a | 2.60 | 3.4842(16) | 155 | x, y, z |
| C10b | H10b | O4b | 2.39 | 3.1704(17) | 140 | $-x, -y, 2-z$ |
| C11a | H11a | O5b | 2.46 | 3.1509(17) | 130 | $2-x, 1-y, 1-z$ |
| C14a | H14a | O3a | 2.49 | 3.4377(17) | 159 | $1-x, 1-y, 1-z$ |
| C16a | H16b | O2a | 2.56 | 3.5241(17) | 165 | $2-x, 1-y, 1-z$ |
| C18a | H18a | O7b | 2.53 | 3.2637(18) | 131 | $1-x, -y, 1-z$ |

C19a H19c O3a 2.55 3.5338(19) 179 $1-x, 1-y, 1-z$