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Supporting Information

Simple Development of Novel Reversible Colorimetric Thermometer Using Urea Organogel Embedded with Thermochromic Hydrazone Chromophore

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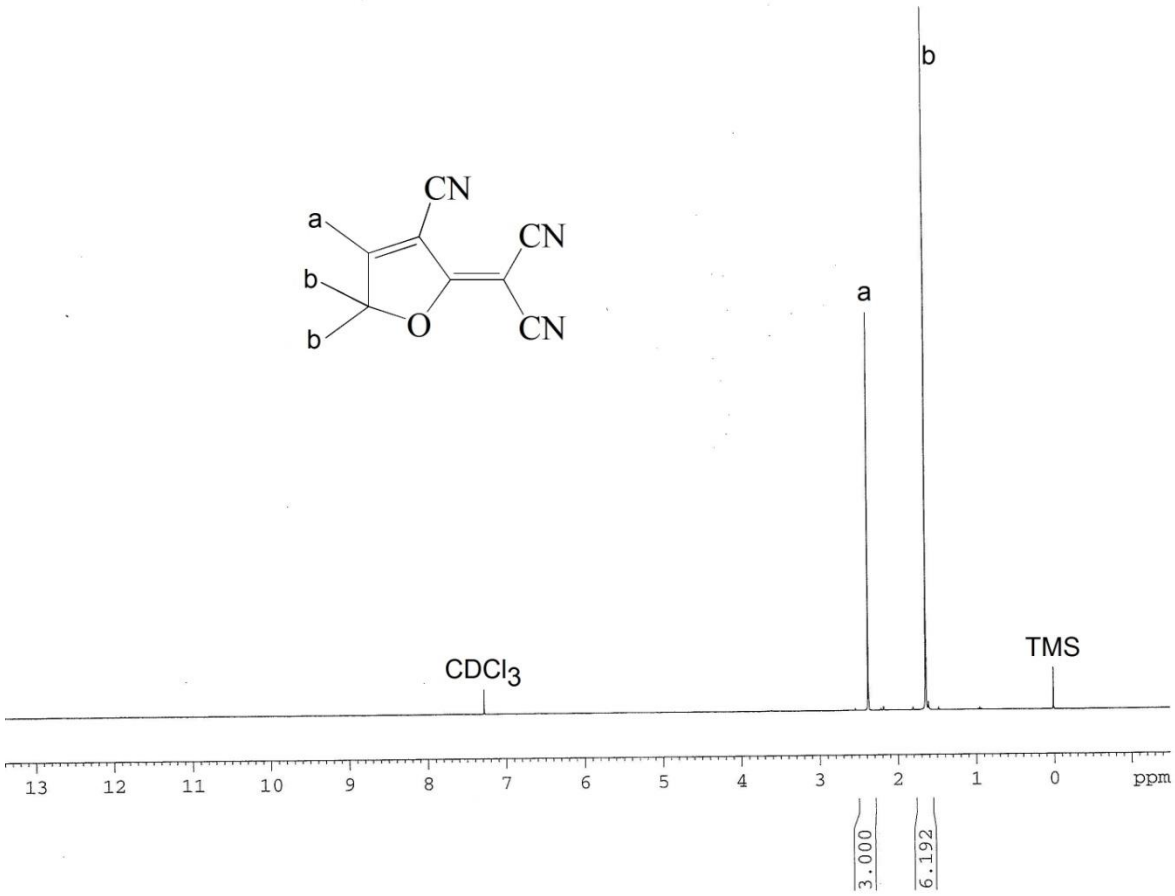

Figure S1. [1]H NMR spectra of TCF heterocyclic molecule.

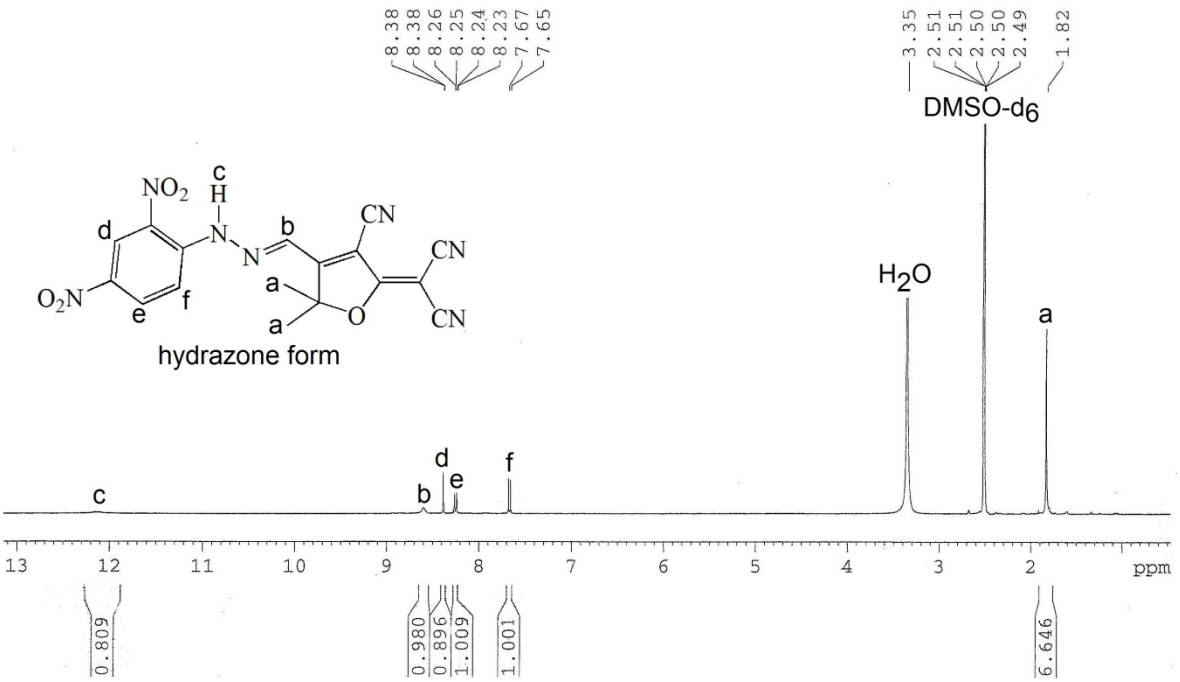

Figure S2. [1]H NMR spectra of TCFH chromophore (hydrazone form) under ambient conditions.

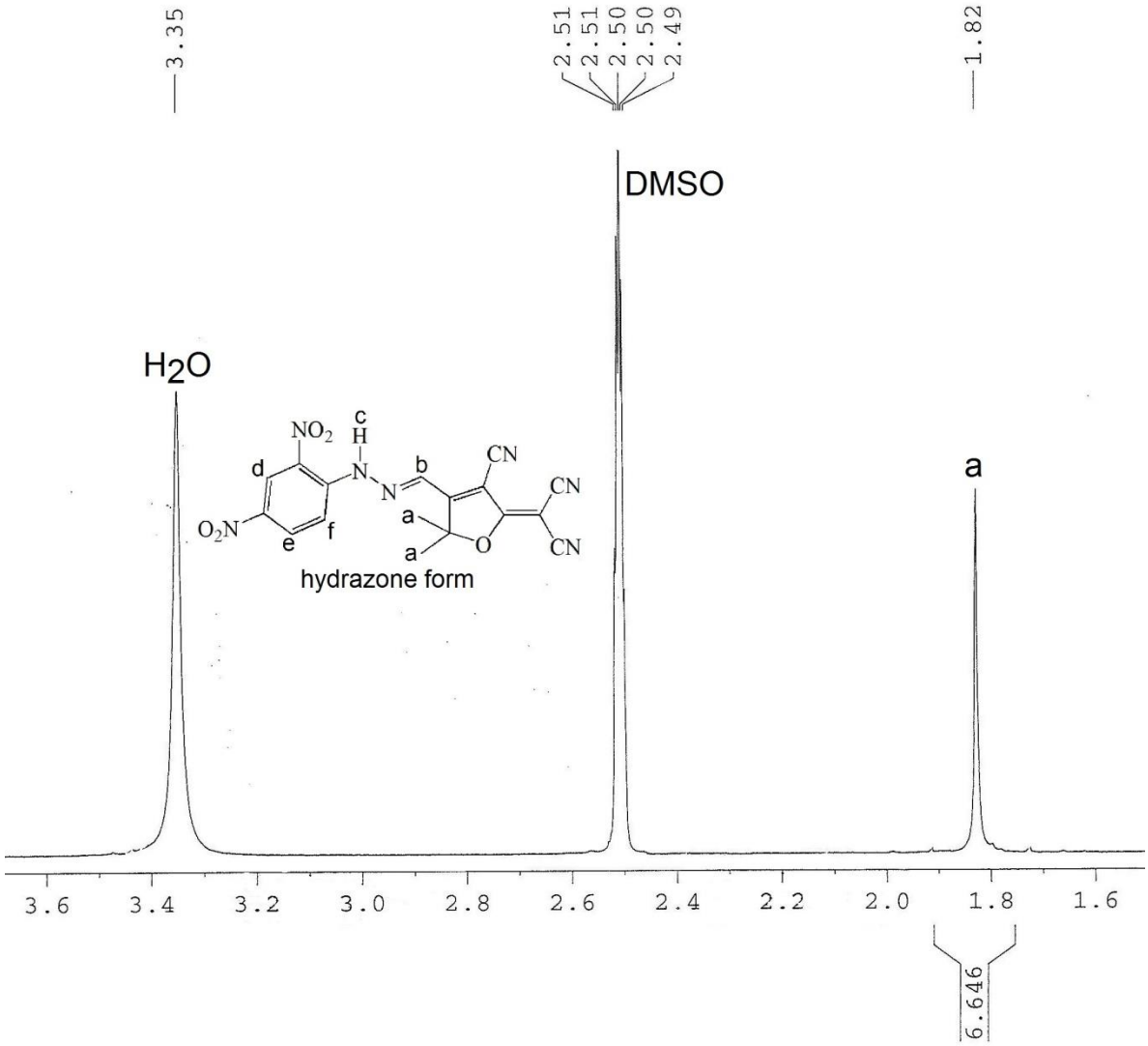

Figure S3. [1]H NMR spectra of TCFH chromophore (hydrazone form) under ambient conditions; magnification of aliphatic area.

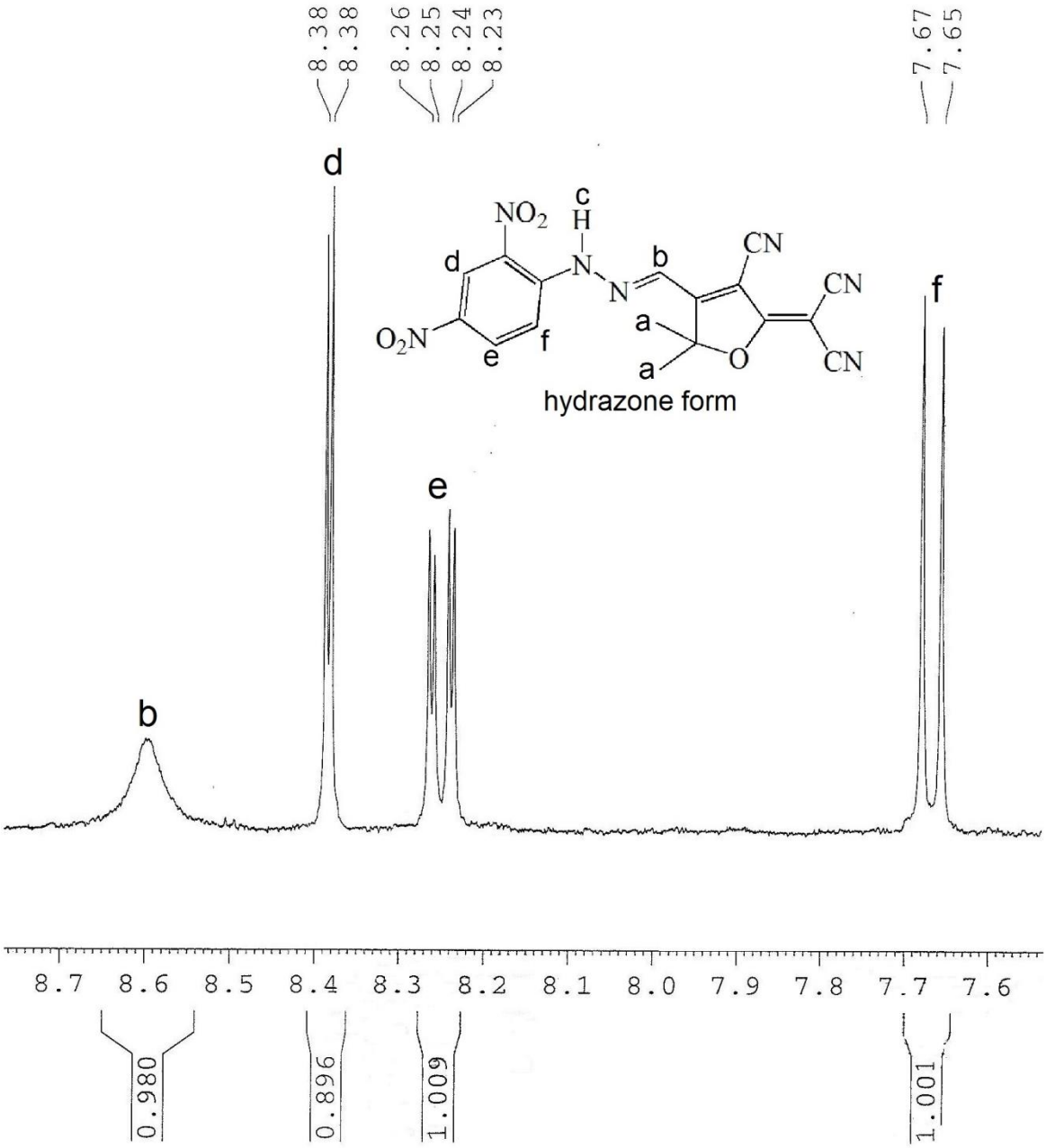

Figure S4. [1]H NMR spectra of TCFH chromophore (hydrazone form) under ambient conditions; magnification of aromatic area.

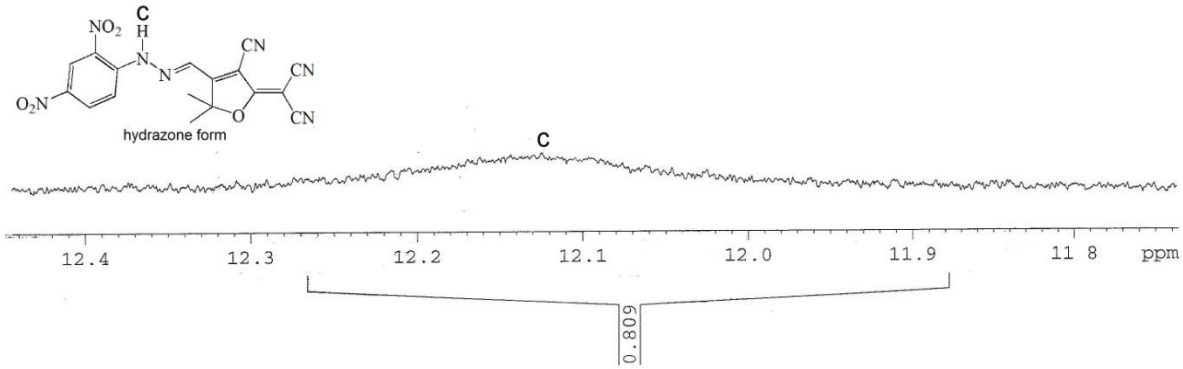

Figure S5. ^{1}H NMR spectra of TCFH chromophore (hydrazone form) under ambient conditions demonstrating the signal for the NH group.

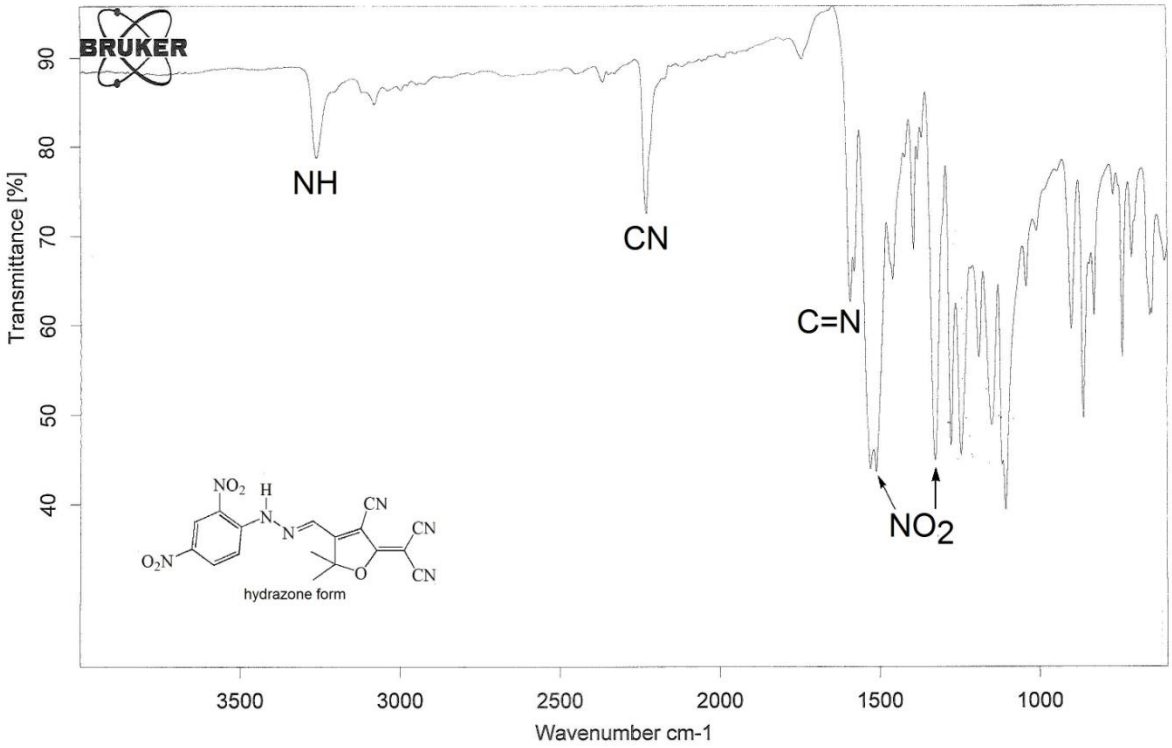

Figure S6. FT-IR spectra of TCFH chromophore (hydrazone form).

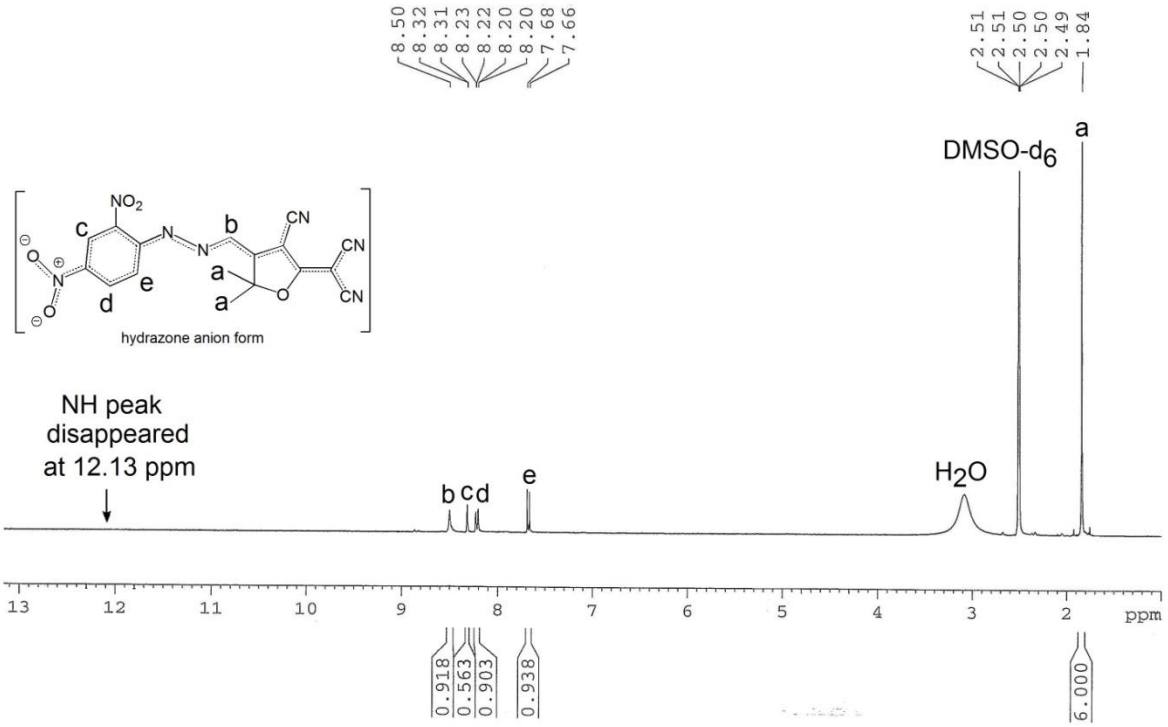

Figure S7. ^{1}H NMR spectra of TCFH chromophore (hydrazone anion form) at 65°C.

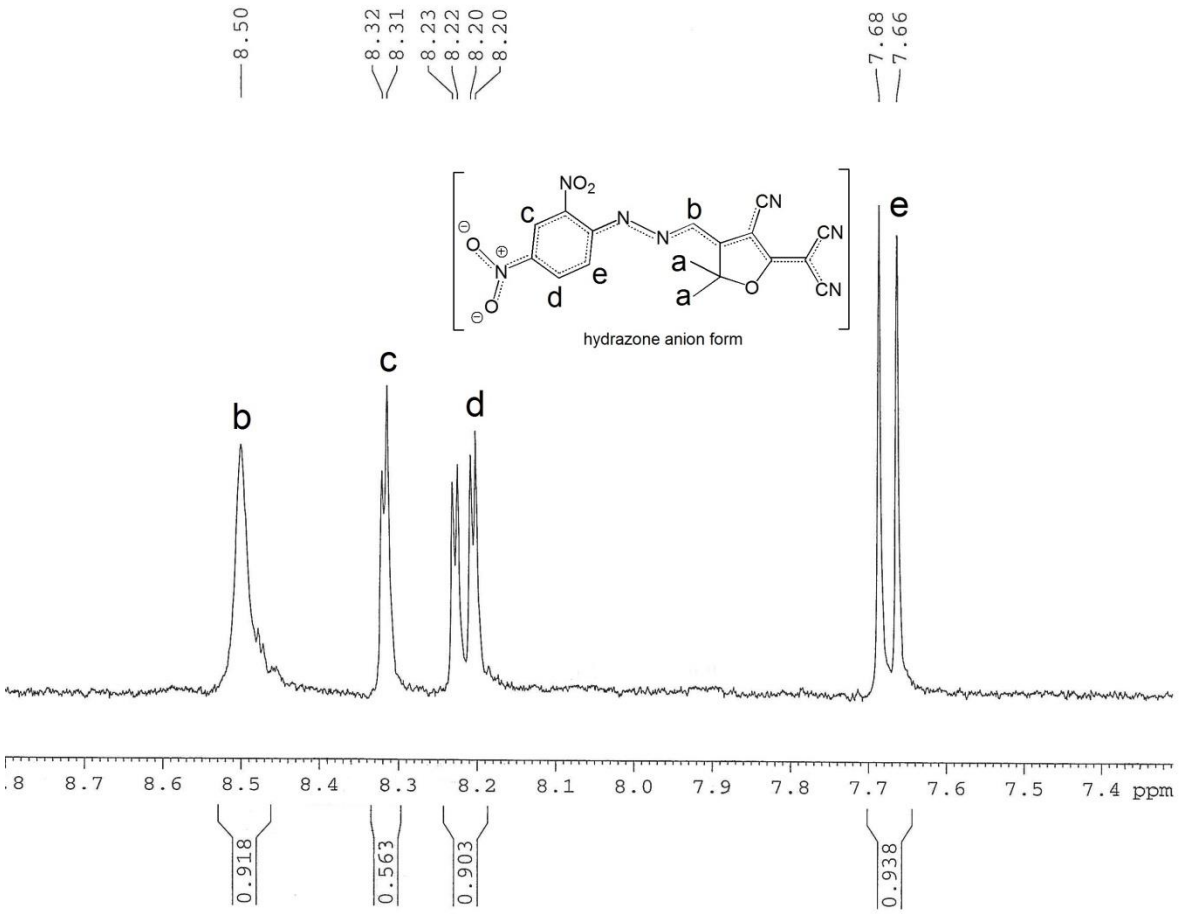

Figure S8. [1]H NMR spectra of TCFH chromophore (hydrazone anion form) at 65°C; magnification of aromatic area.

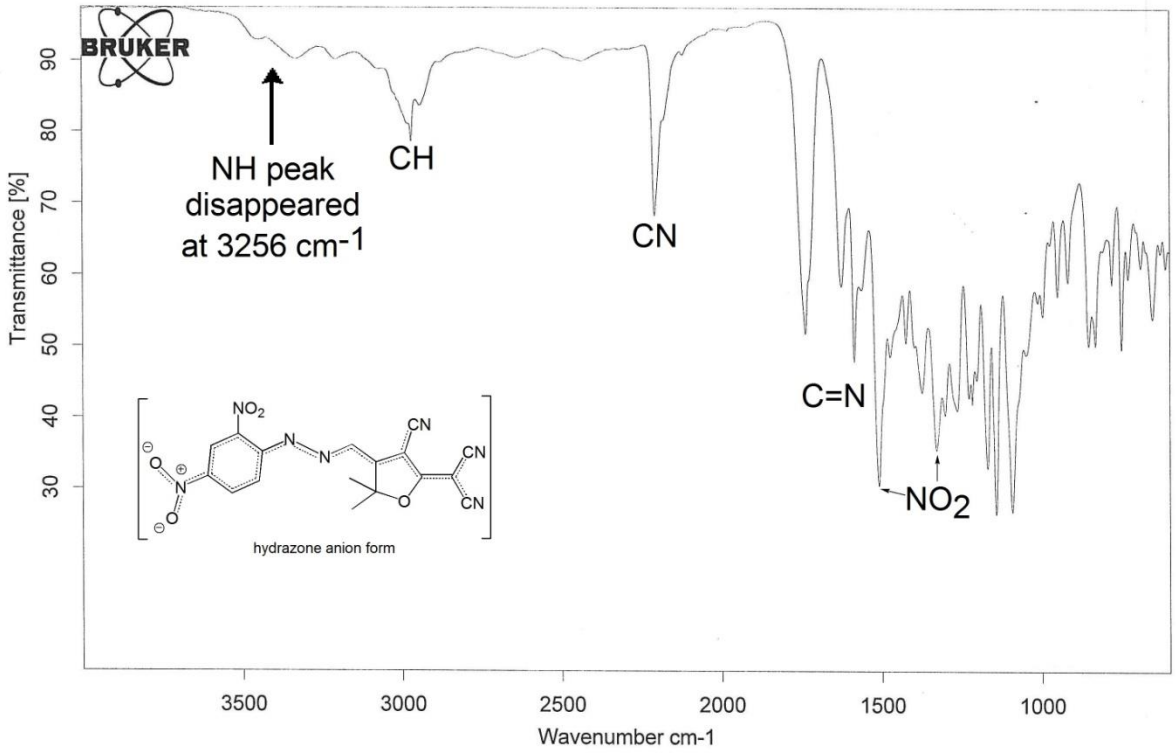

Figure S9. FT-IR spectra of TCFH chromophore (hydrazone anion form); the solid powder of the hydrazone form was dissolved in a mixture of triethylamine/acetone (1:1) and then air-dried under ambient conditions to generate the hydrazone anion form.

References

1. Khattab, T.A.; Tiu, B.D.B.; Adas, S.; Bunge, S.D.; Advincula, R.C. pH triggered smart organogel from DCDHF-Hydrazone molecular switch. *Dye. Pigment.* **2016**, *130*, 327–336.

2. Khattab, T.A.; Tiu, B.D.B.; Adas, S.; Bunge, S.D.; Advincula, R.C. Solvatochromic, thermochromic and pH-sensory DCDHF-hydrazone molecular switch: response to alkaline analytes. *RSC Adv.* **2016**, *6*, 102296–102305