Supporting Information

for

Formation and Spectroscopy of Dicyanotriacetylene (NC_8N) in Solid Kr

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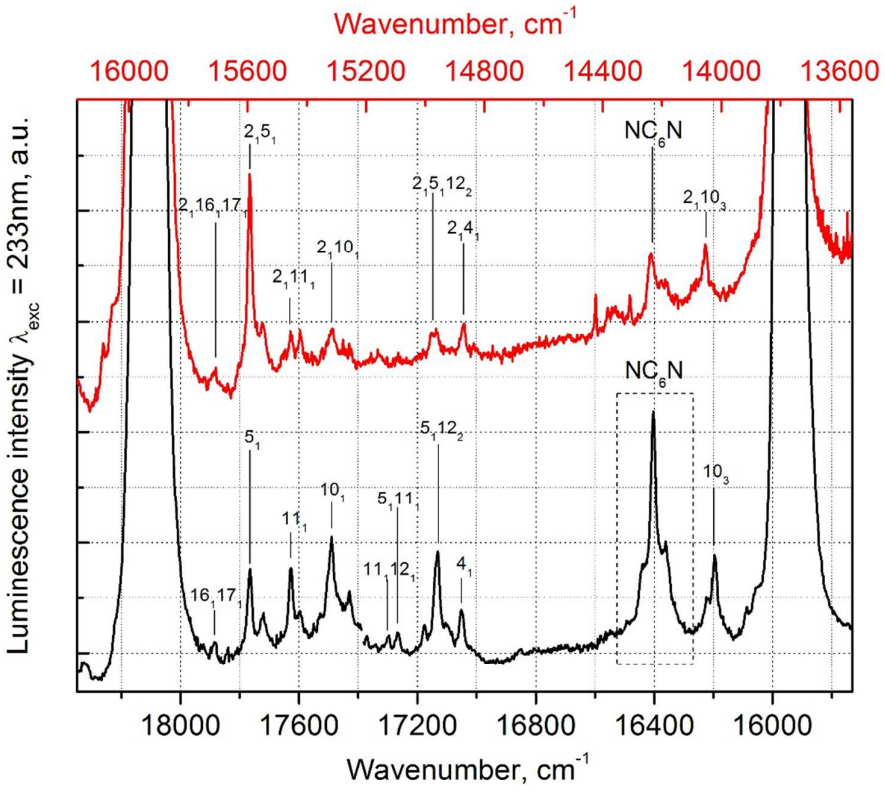

Fig. S1. Two adjacent spectral regions of NC_8N phosphorescence in solid krypton (resultant from a mixture of $HC_3{}^{14}N$ and $HC_3{}^{15}N$ precursors), shifted along the wavenumber axis to line up the bands differing only by the excitation of the ν_2 mode.

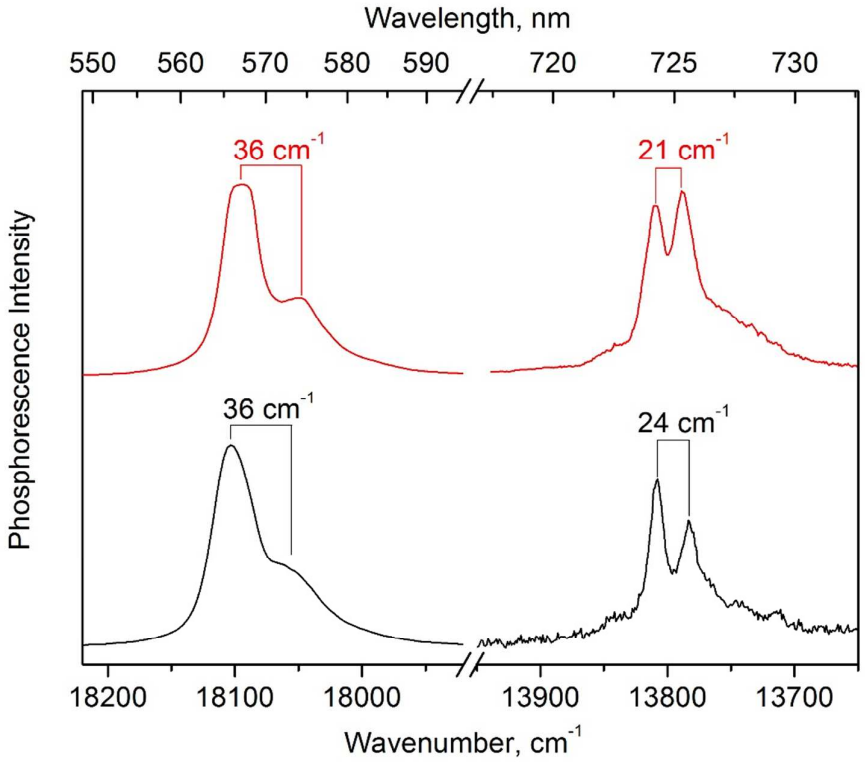

Fig. S2. Selected fragments of NC_8N phosphorescence generated in solid krypton, from a 1:1 $HC_3{}^{14}N$:$HC_3{}^{15}N$ mixture of precursors (upper trace, in red) and from $HC_3{}^{14}N$ alone (bottom trace), showing (left) the *0-0* band structure due to unequal matrix trapping sites, and (right) the possible $2^0_2/4^0_4$ Fermi resonance pair. Spectra recorded for thermally annealed samples.