Supplementary Material (ESI) for Dalton Transactions


# Supplementary Material

## Combining hydrogen bonding and metal coordination for controlling topochemical [2+2] cycloaddition from multi-component assemblies.

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### 1. List of Figures

**Figure S1**. $^{1}$H NMR spectrum of the *rctt*-4,4'-tpcb isomer obtained from the photoreaction of compound **2**.

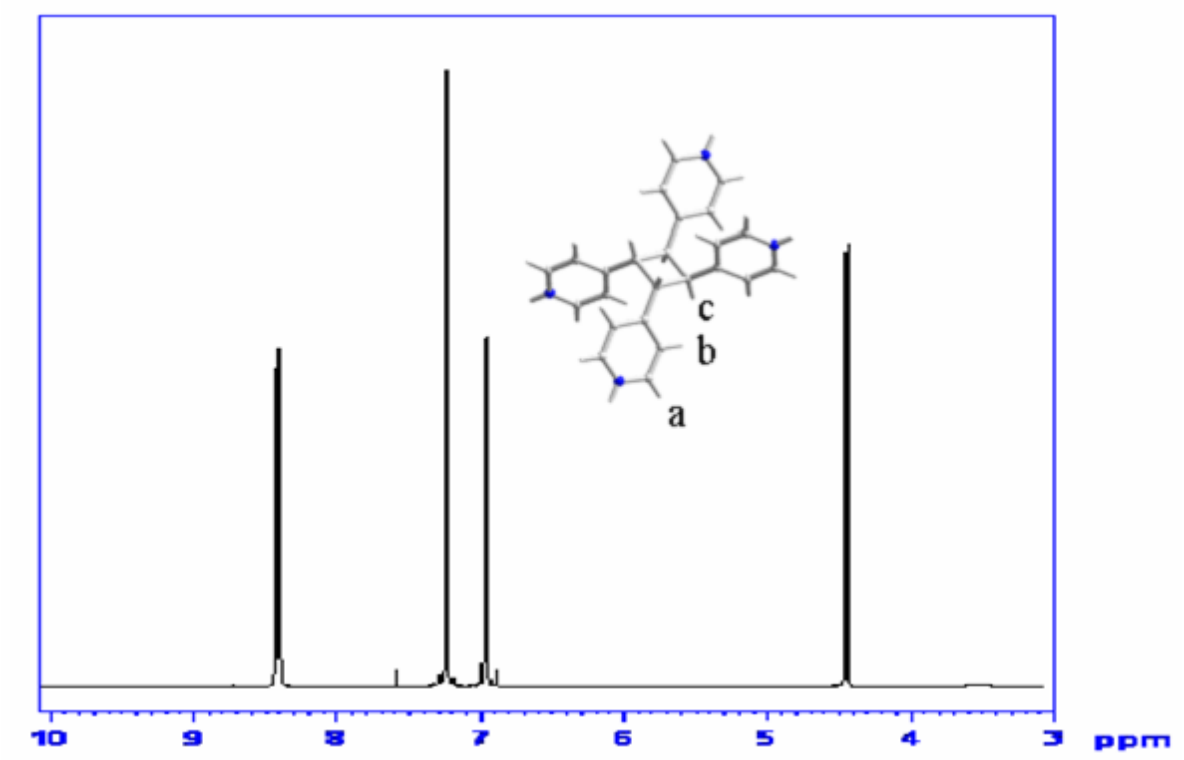



**Figure S2.** $^{1}$H NMR spectrum of the *rctt*-4,4'-tpcb isomer obtained from the photoreaction of compound **3**.

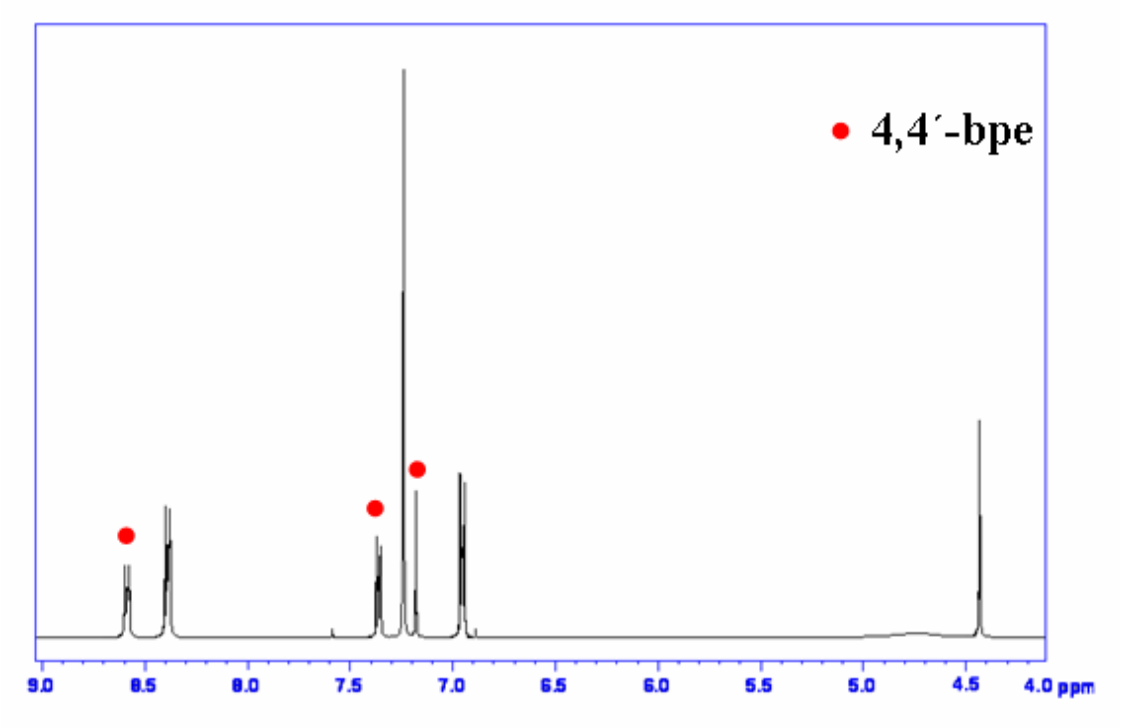


**Figure S3**. $^{1}$H NMR spectrum of the *rctt*-4,4'-tpcb isomer obtained from the photoreaction of compound **4**.

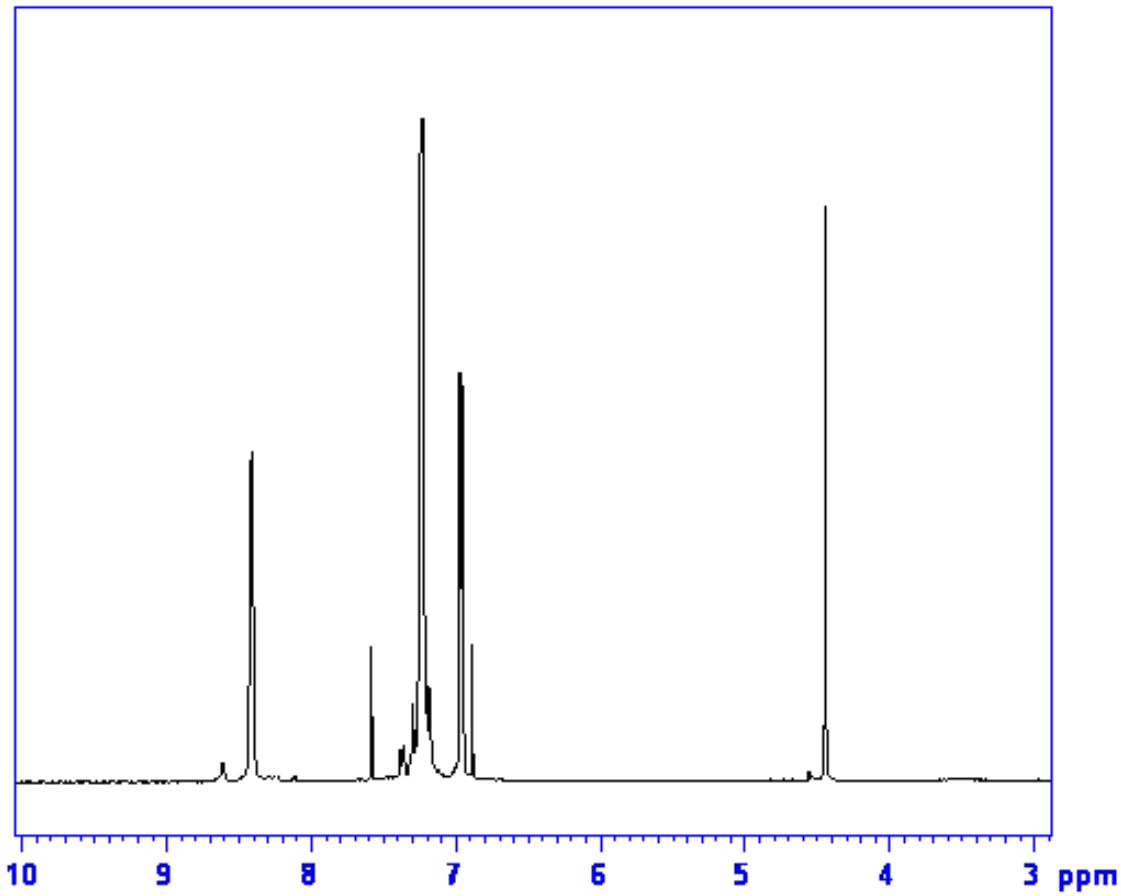
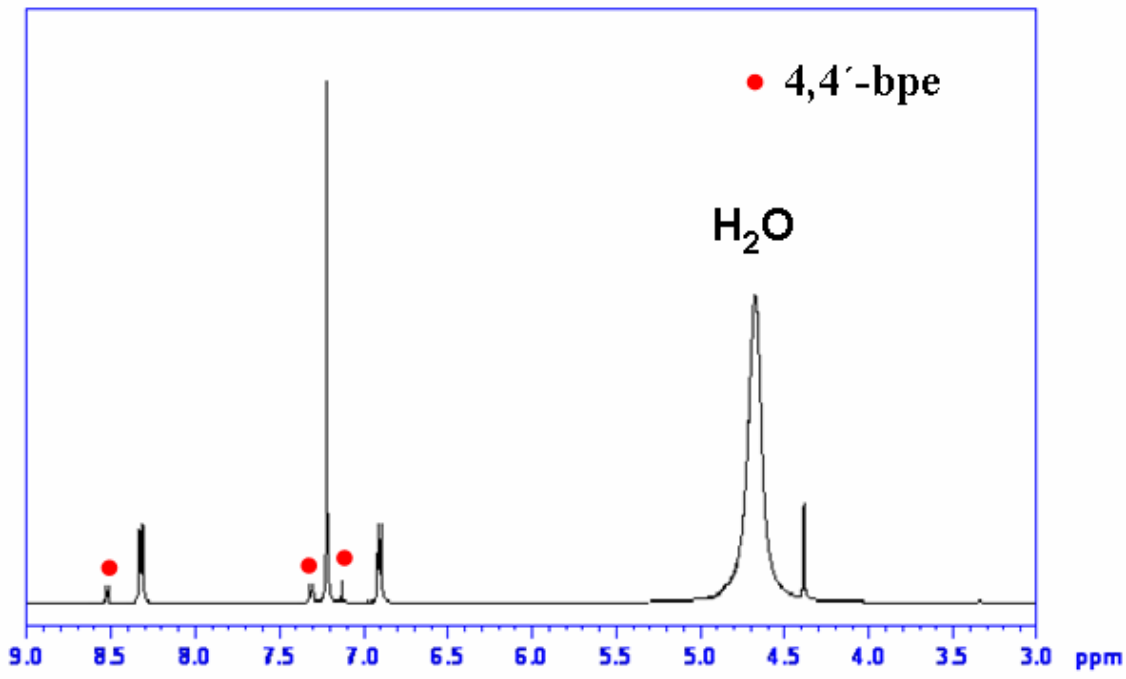
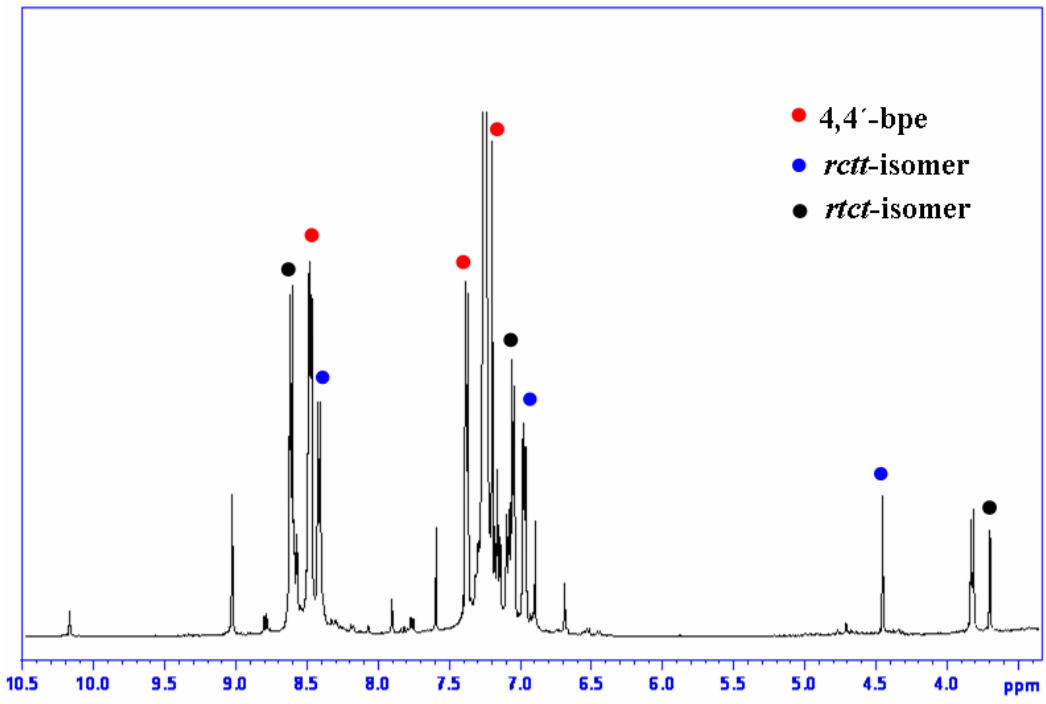


**Figure S4**. (a) $^{1}$H NMR spectrum of the *rctt*-4,4'-tpcb isomer obtained from the photoreaction of the desolvated crystals of **5**. (b) $^{1}$H NMR spectrum of the photoproducts obtained from the photoreaction of compound **5** in its mother-liquor.




**(a)**




**(b)**