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## Experimental and theoretical investigation of structures, stoichiometric diversity and bench stability of cocrystals with a volatile halogen bond donor

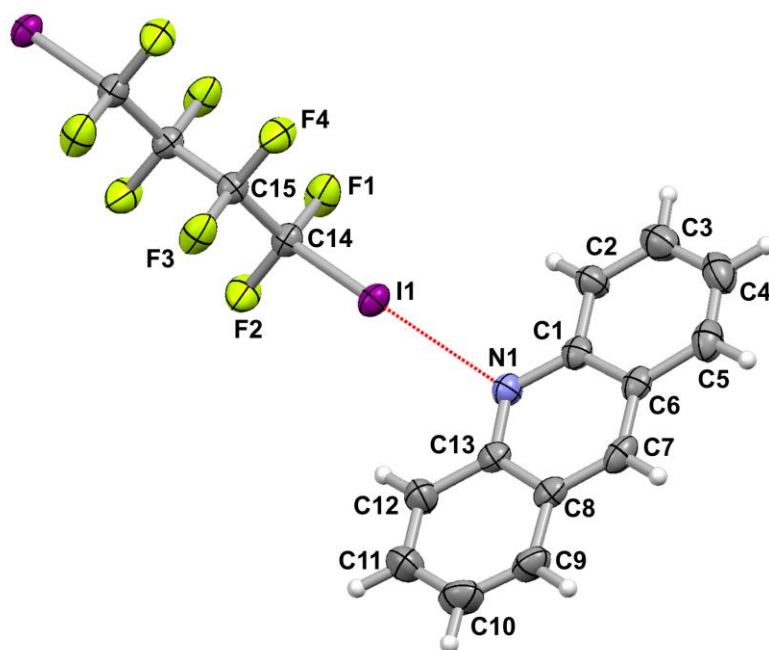
*Katarina Lisac, Vinko Nemec, Filip Topić, Mihails Arhangeliskis, Poppy Hindle, Ricky Tran, Igor Huskić, Andrew J. Morris, Tomislav Friščić\* and Dominik Cincić\**

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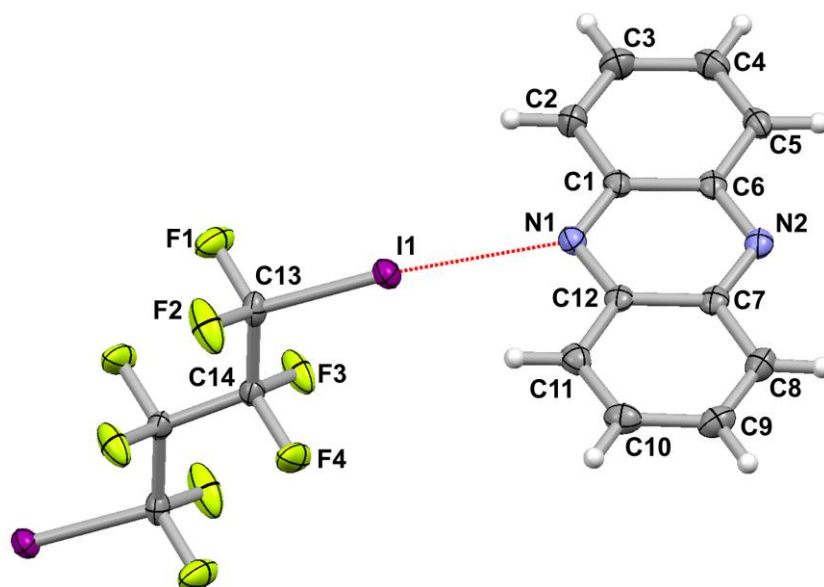
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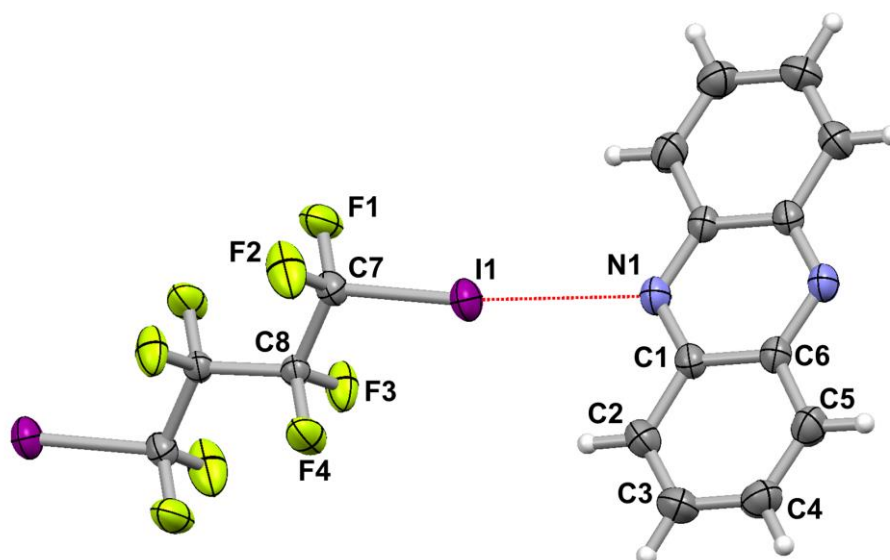
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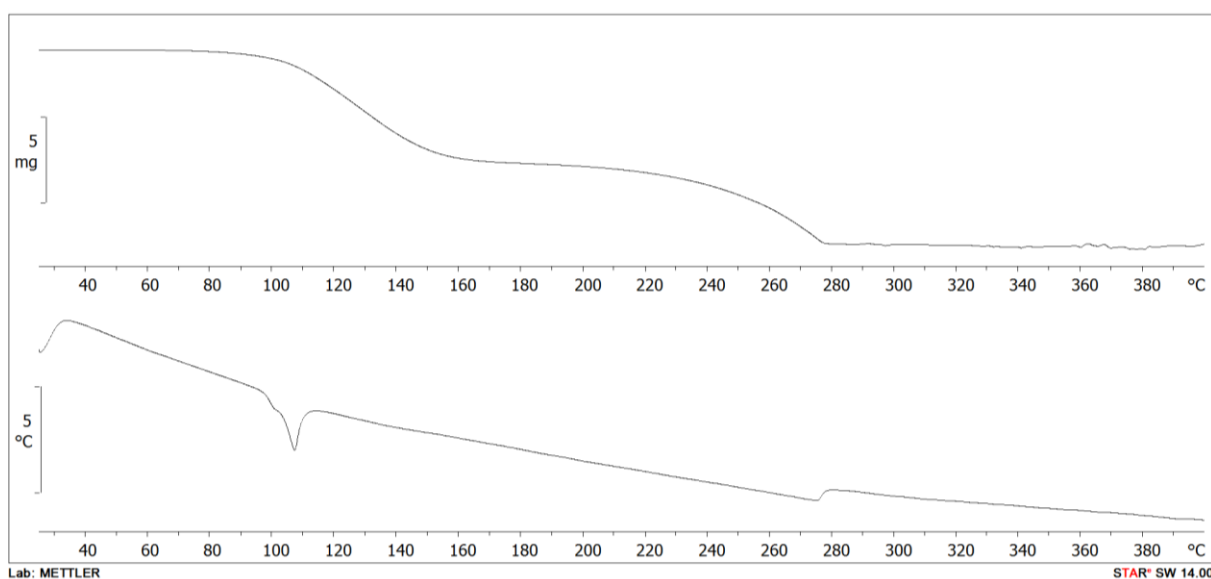
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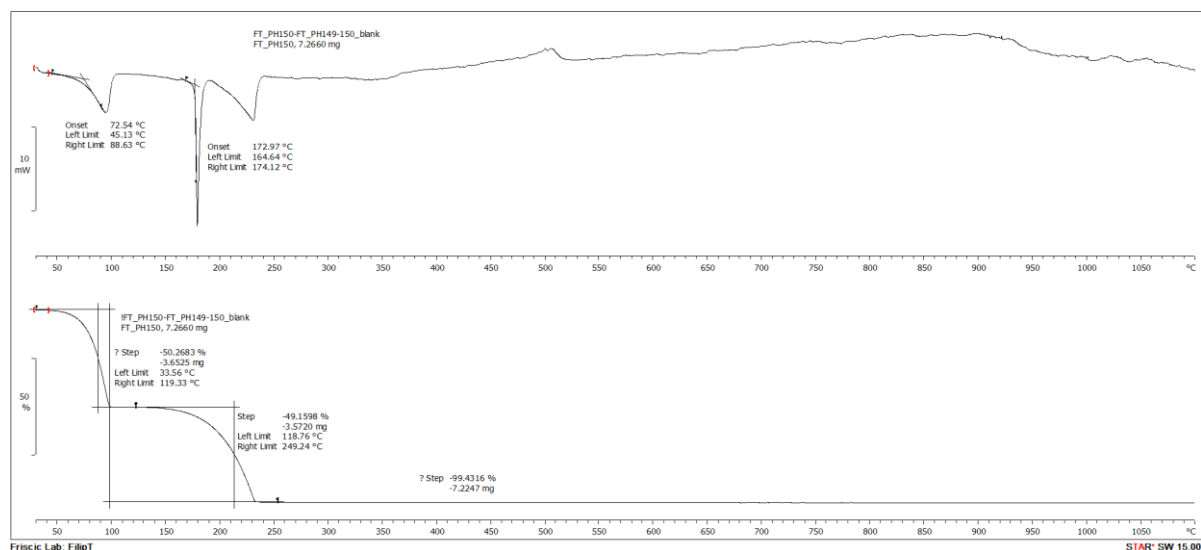
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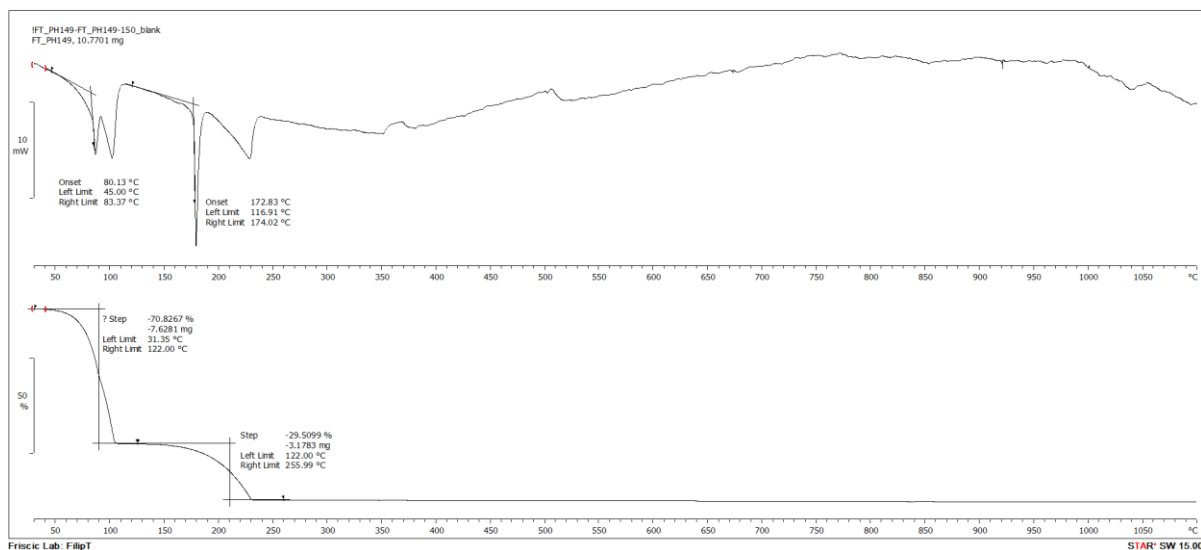
**Figure S3.** Molecular structure of (phen)(ofib) showing the atom-labelling scheme. Displacement ellipsoids are drawn at the 50 % probability level, halogen bonds are marked with red dashed lines, and H atoms are shown as small spheres of arbitrary radius.



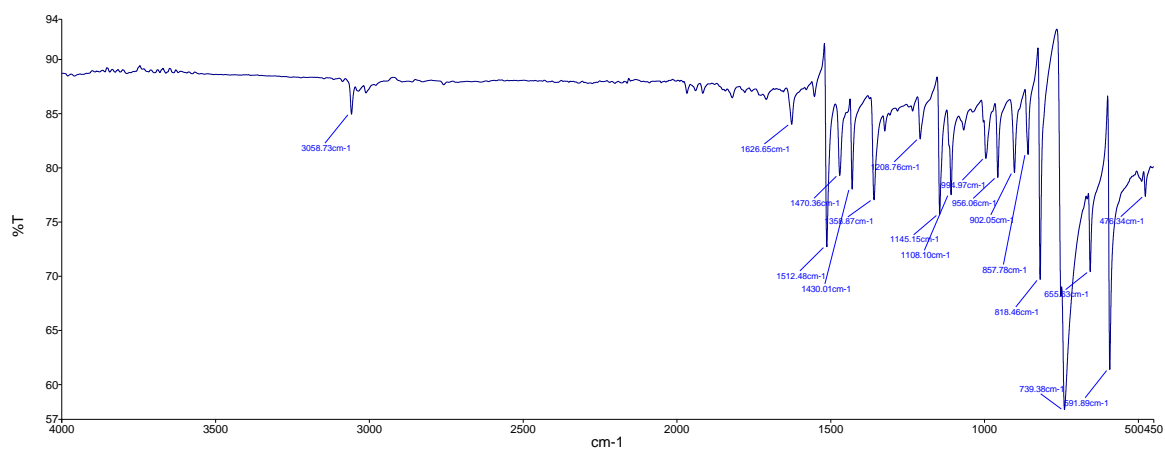
**Figure S4.** TGA (top) and DTA (bottom) curves for the cocrystal (acr)<sub>2</sub>(ofib).



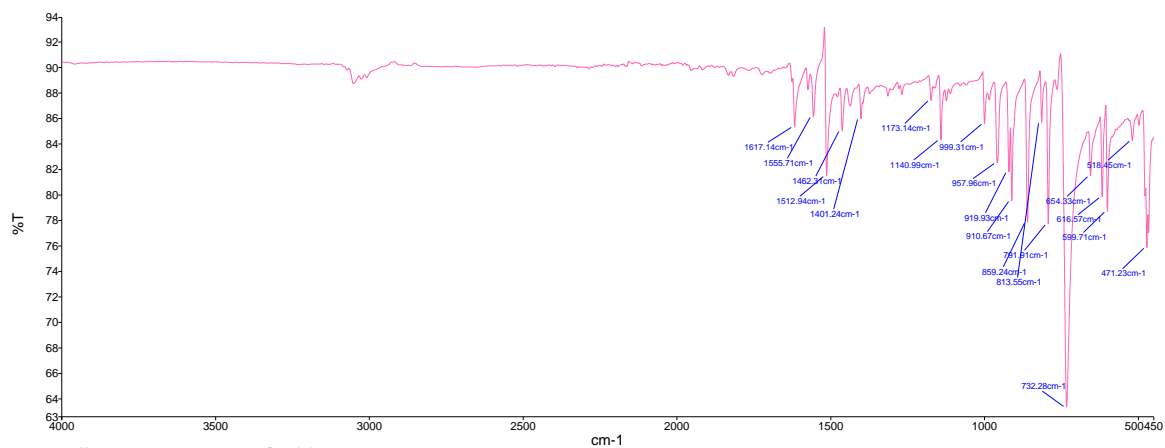
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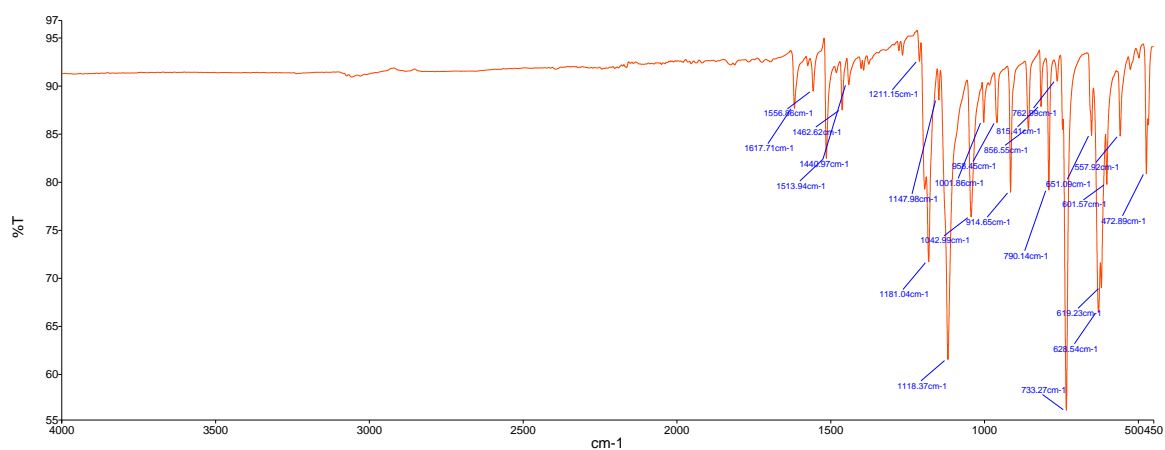
**Figure S6.** DSC (top) and TGA (bottom) curves for the cocrystal (phen)(ofib).



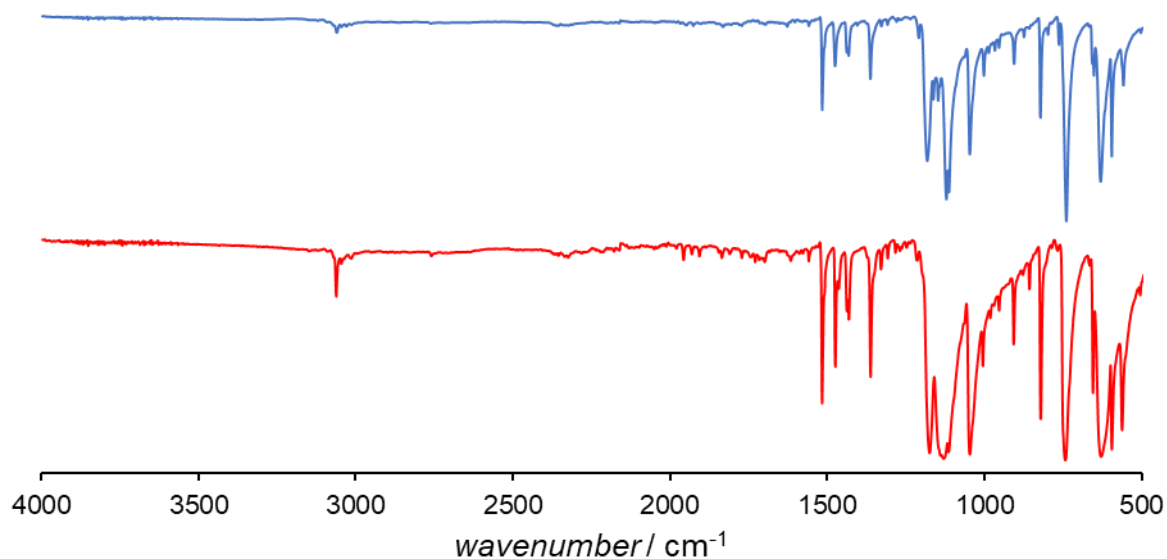
**Figure S7.** IR-ATR spectrum of solid **phen** reactant.



**Figure S8.** IR-ATR spectrum of solid **acr** reactant.



**Figure S9.** IR-ATR spectrum of the cocrystal **(acr)<sub>2</sub>(ofib)**.



**Figure S10.** Overlay of IR-ATR spectra of the cocrystals **(phen)<sub>2</sub>(ofib)** (blue) and **(phen)(ofib)** (red).