

PAPER (or FOCUS or PERSPECTIVE)

Electronic Supporting Information for:

Light absorption and hole transport properties of copper corroles: from aggregates to a liquid crystal mesophase.

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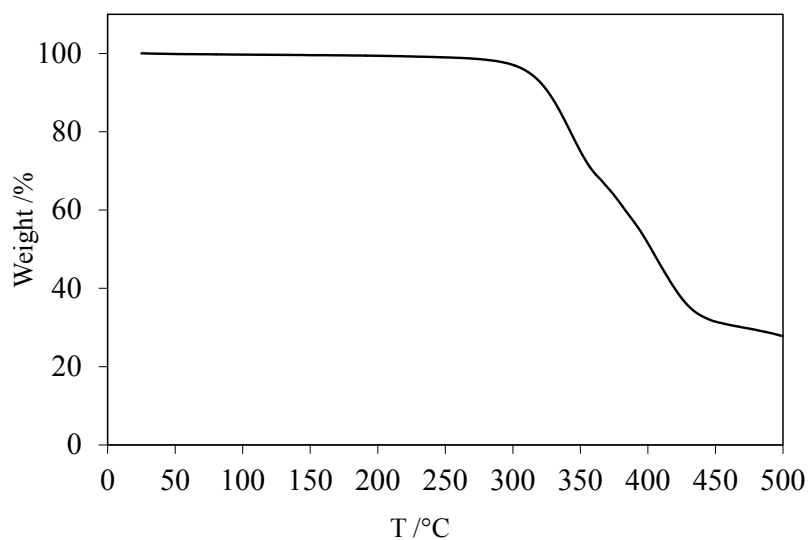


Fig. S1 TGA of **CorLC** recorded at 5 °C/min.

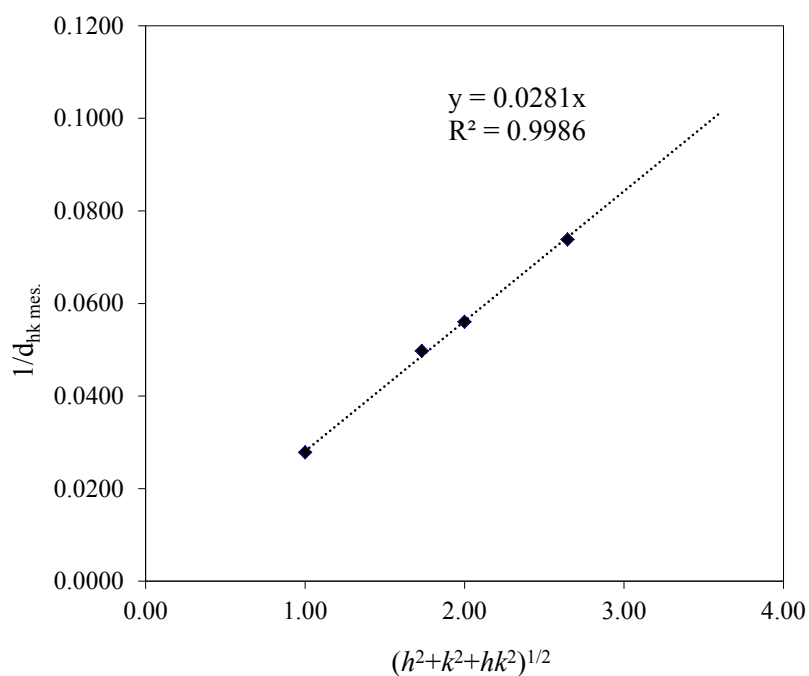


Fig. S2 Graphical representation of $1/d_{hk}$ vs $(h^2 + k^2 + hk)^{1/2}$ for the reflections $(hk) = (10), (11), (20), (21)$ measured for **CorLC** at 30 °C.

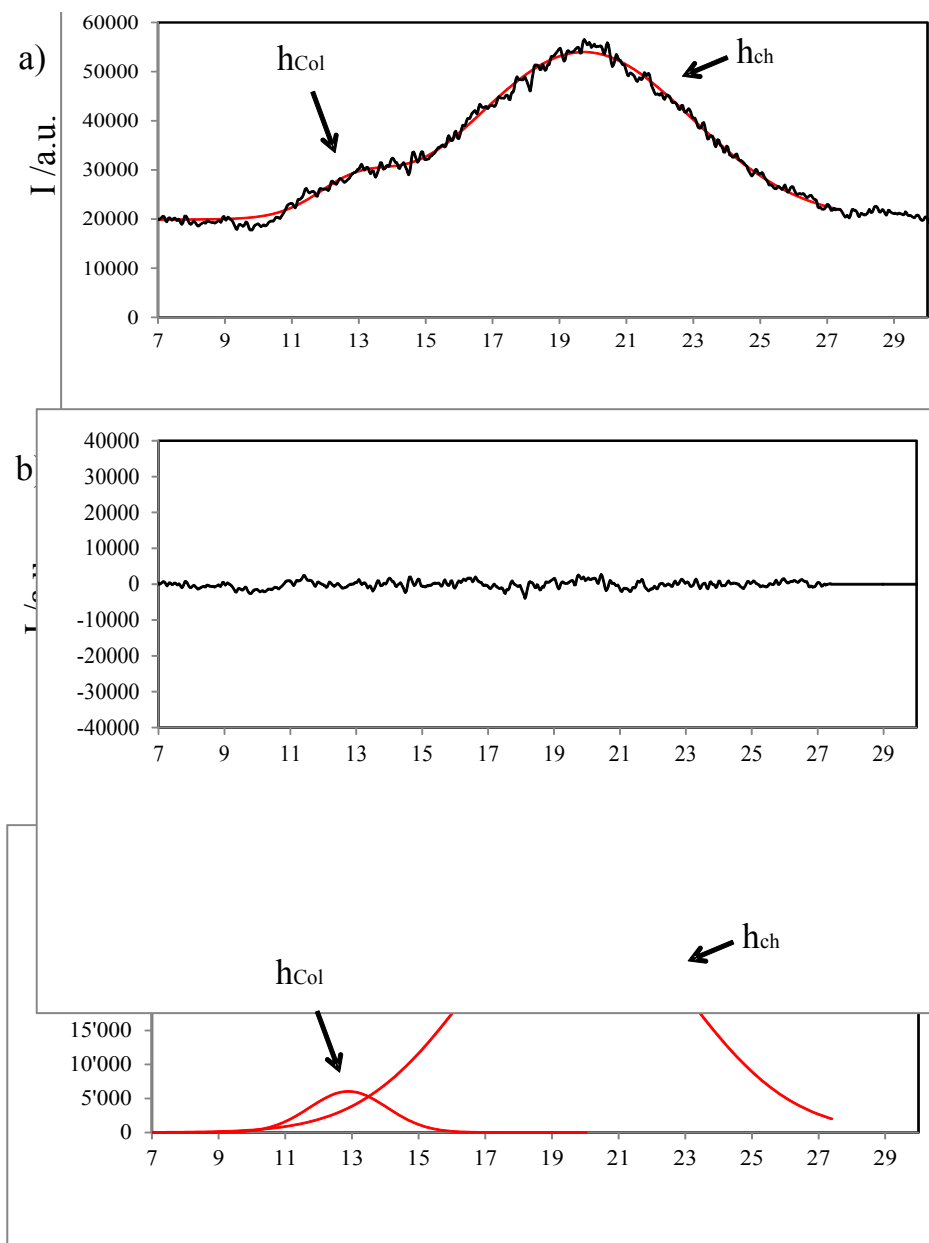
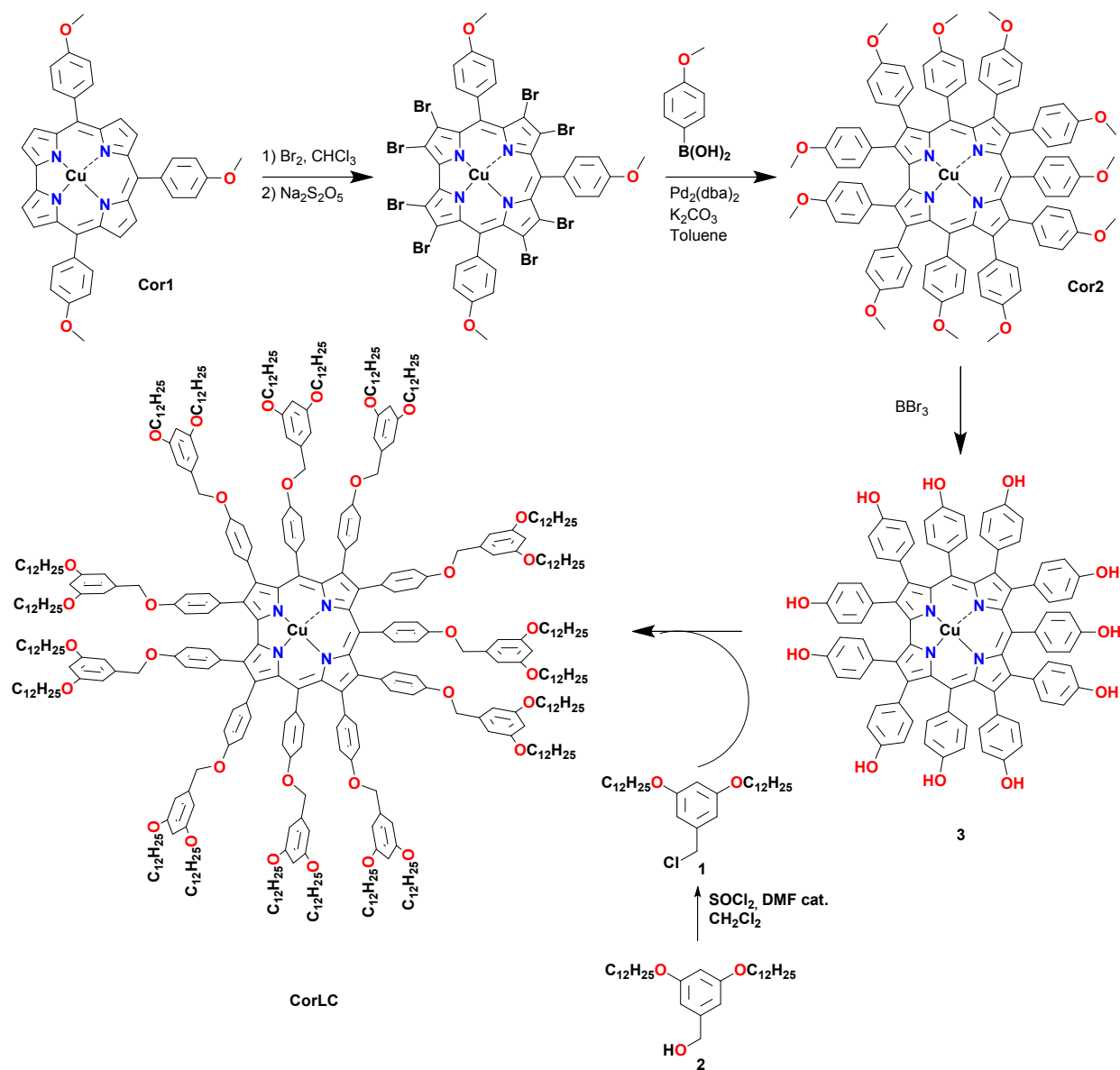


Fig. S3 (a) SA-XRD profile for **CorLC** ($7^\circ < 2\theta < 29^\circ$); experimental points (black curve), and fitting Gaussian function (red curve). (b) Residual signal resulting from the subtraction of the experimental and fitted values. (c) Deconvoluted Gaussian signals for h_{Col} and h_{ch} .

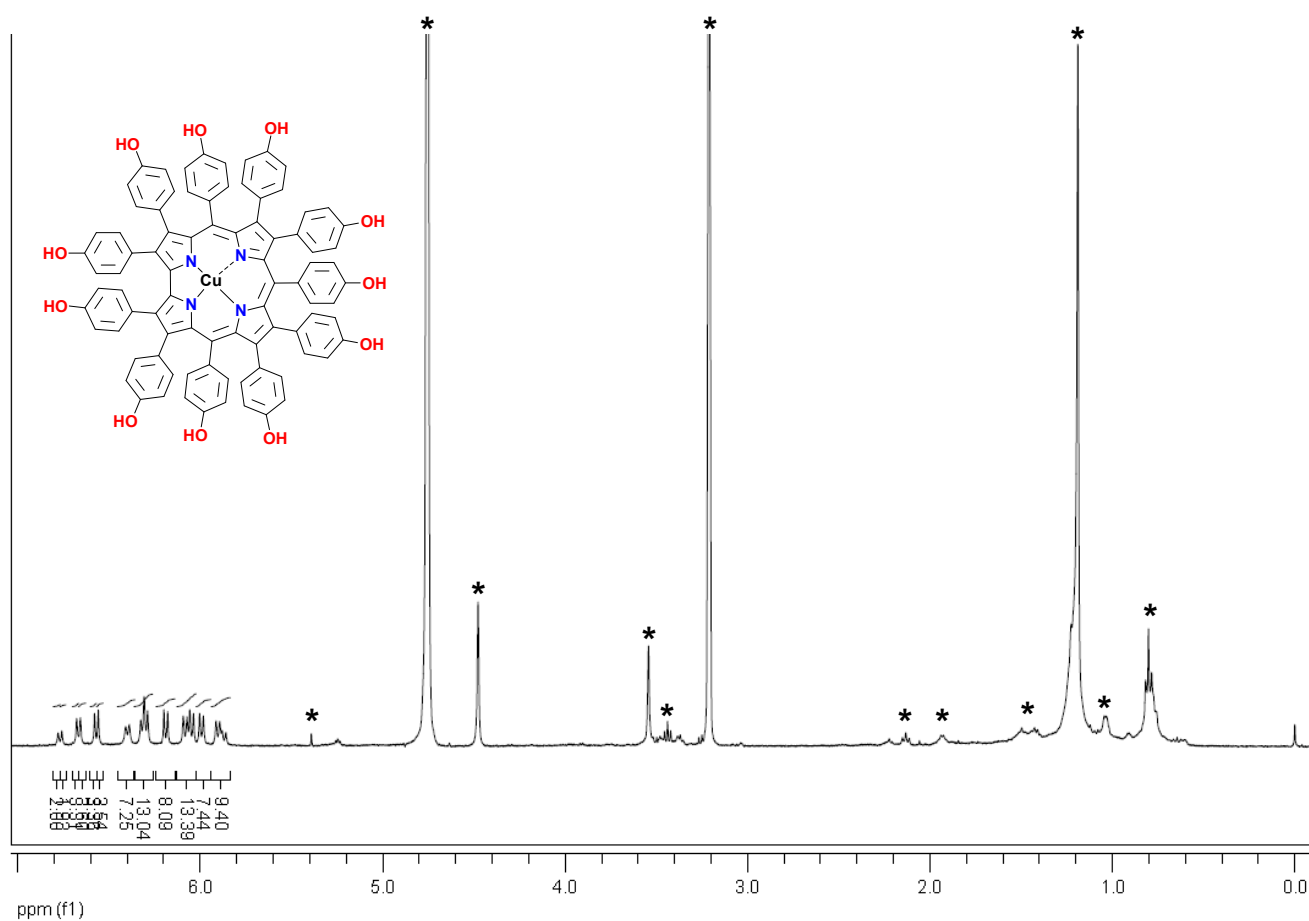
Table S1: Field effect mobilities (μ), threshold voltages (V_T) and on/off ratio (I_{on}/I_{off}) of all corrole-based OTFT devices incorporating **Cor1** and **Cor2**.

OFETs ^a		μ (cm ² .V ⁻¹ .s ⁻¹)	V_T (V)	I_{on}/I_{off}
Cor1	1)	1.36x10⁻⁶	-14.8	24.5
	2)	8.30x10 ⁻⁷	-17.4	22.4
	3)	6.45x10 ⁻⁷	-13.2	18.2
	4)	5.31x10 ⁻⁷	-24.1	21.3
	5)	4.67x10 ⁻⁷	-33.0	17.3
Cor1	Average	7.67x10 ⁻⁷		
	Standard deviation	3.59 x10 ⁻⁷		
Cor2	1)	1.32x10⁻⁷	-38.5	~10
	2)	5.38x10 ⁻⁸	-54.1	< 10
	3)	3.30x10 ⁻⁸	-61.0	< 10
	4)	3.10x10 ⁻⁸	-77.5	< 10
	5)	3.28x10 ⁻⁸	-45.5	< 10
Cor2	Average	5.65x10 ⁻⁸		
	Standard deviation	4.32 x10 ⁻⁸		

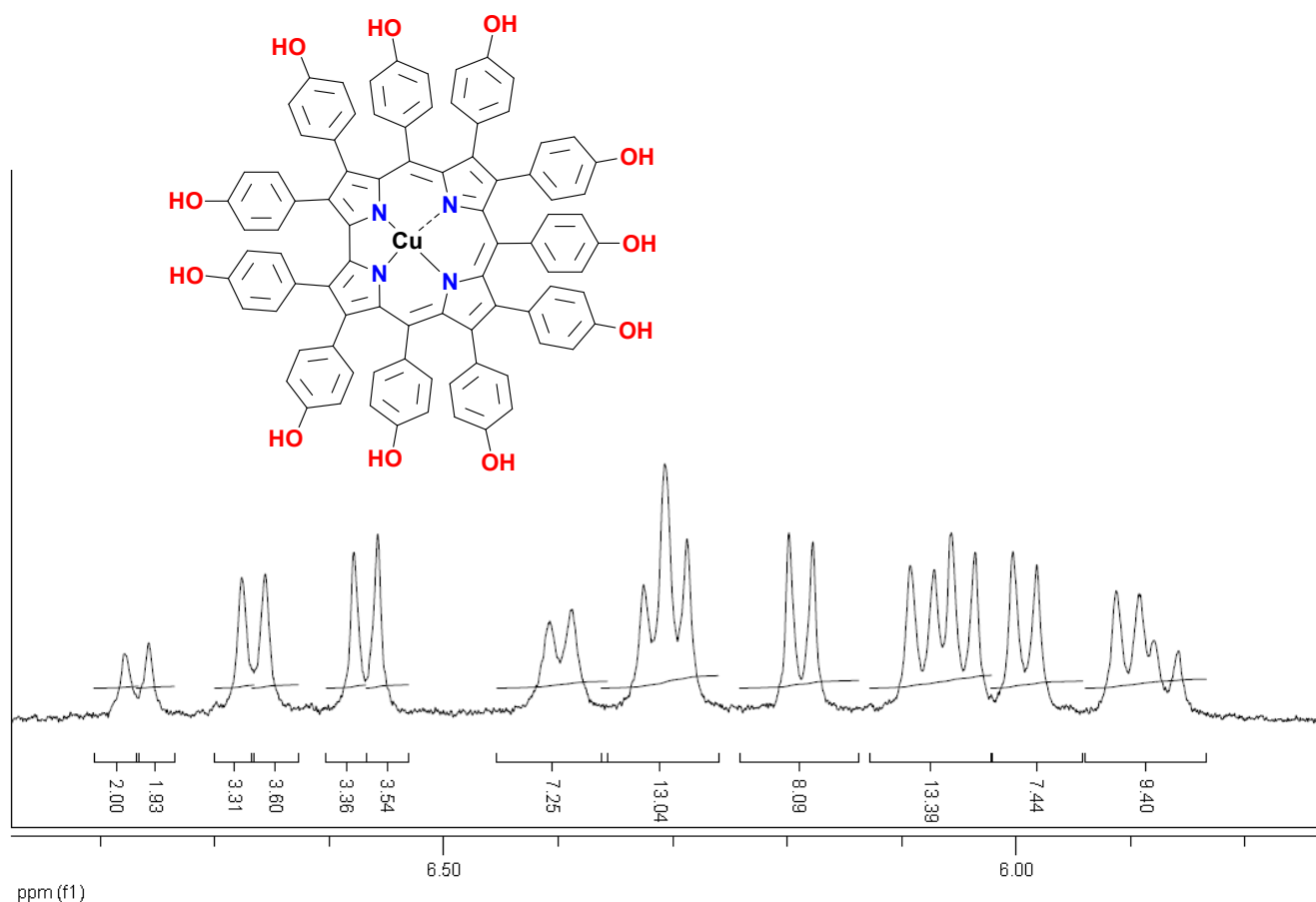
a) The highest results are written in bold characters.



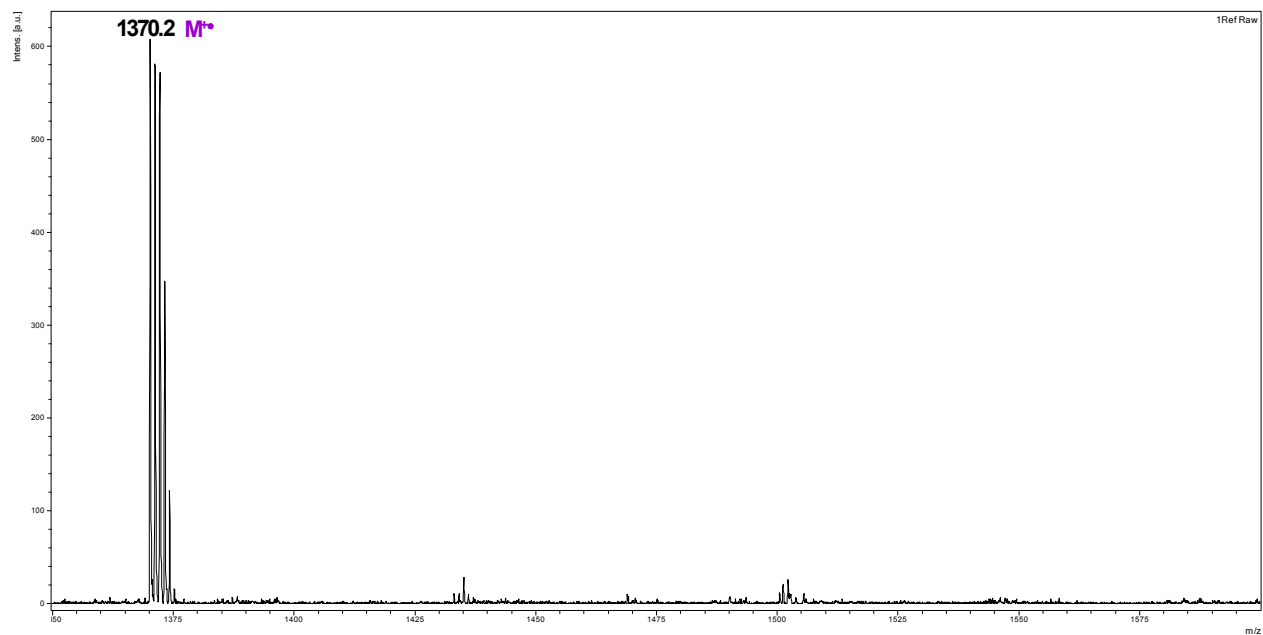
Scheme S1 Full synthetic scheme for the preparation of **CorLC**



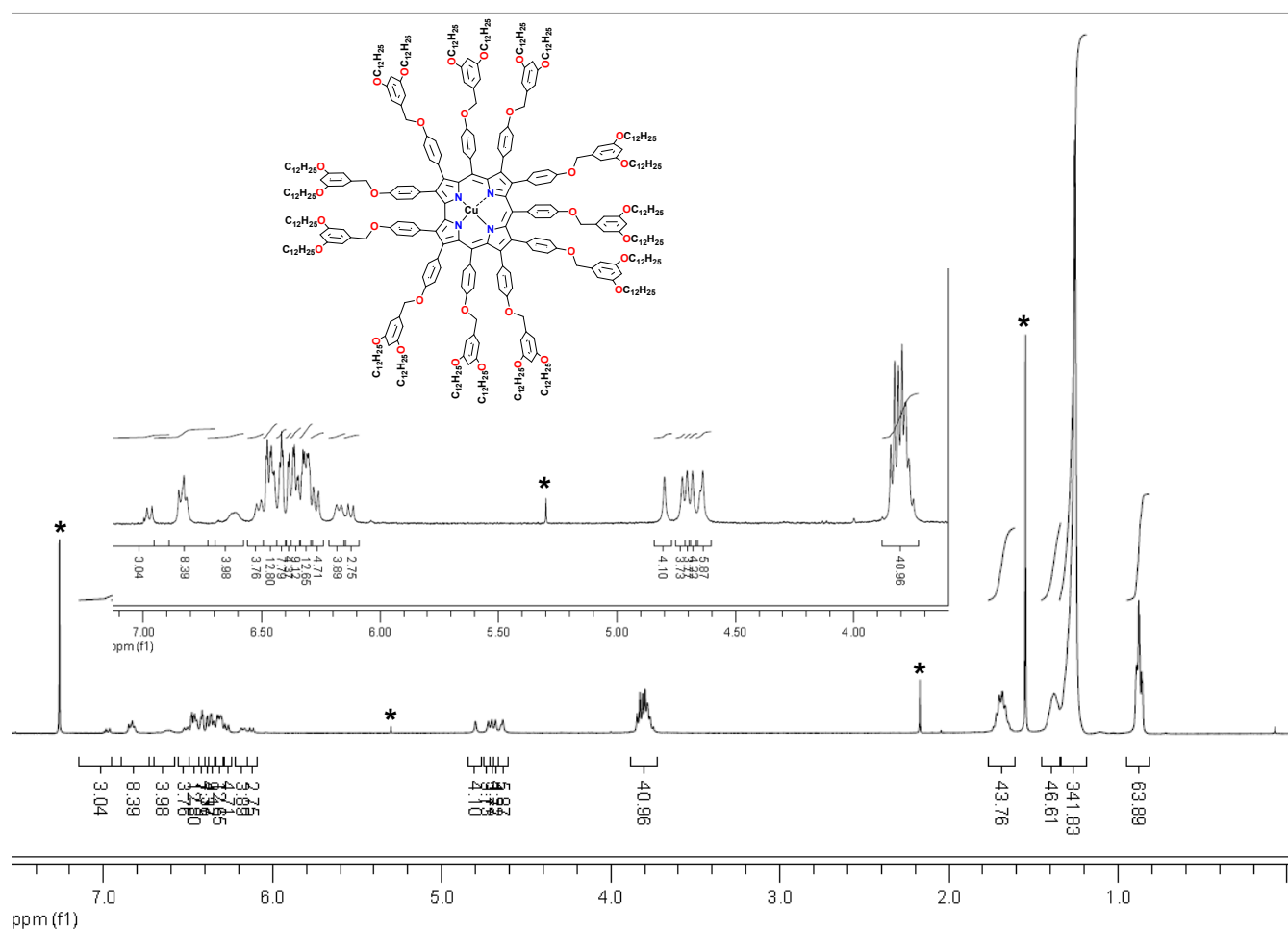
^1H NMR Spectrum of Cu^{III} undeca-(4-hydroxyphenyl)corrole in $\text{THF-}d_8$.

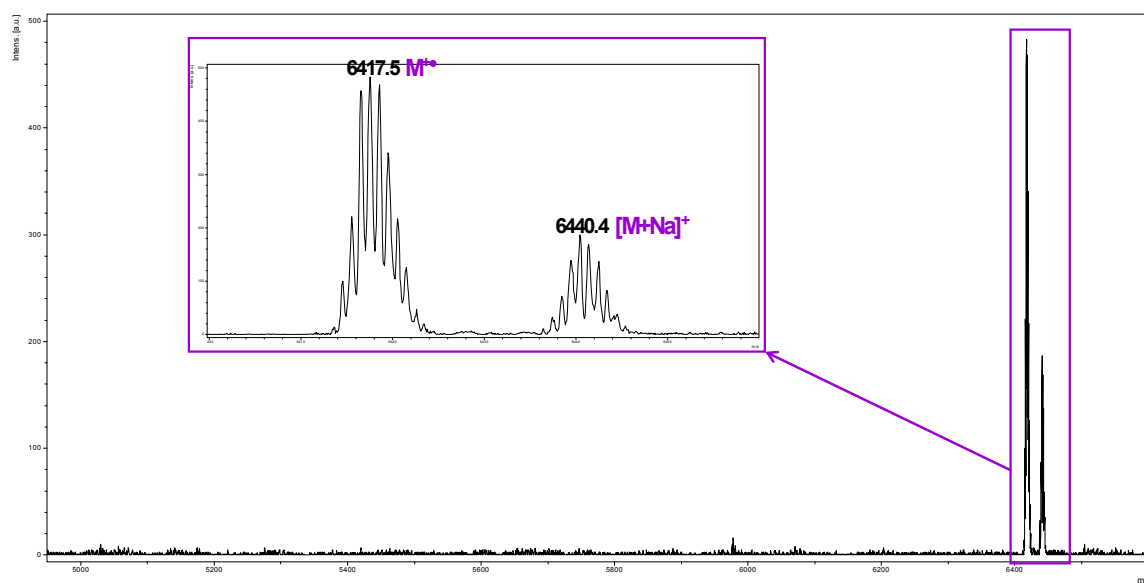


^1H NMR Spectrum of Cu^{III} undeca-(4-hydroxyphenyl)corrole in $\text{THF-}d_8$ (zoom)



MALDI-TOF spectrum of Cu^{III} undeca-(4-hydroxyphenyl)corrole.





MALDI-TOF spectrum of corrole **CorLC**.