

Journal Name

ARTICLE

## Supporting Information

### Controlled manipulation of the Co-Alq<sub>3</sub> interface by rational design of Alq<sub>3</sub> derivatives

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Olaf Fuhr<sup>b</sup>, Mario Ruben<sup>a,b,d</sup>, Mirko Cinchetti<sup>a</sup>, Martin Aeschlimann<sup>a</sup>

NMR Spectra

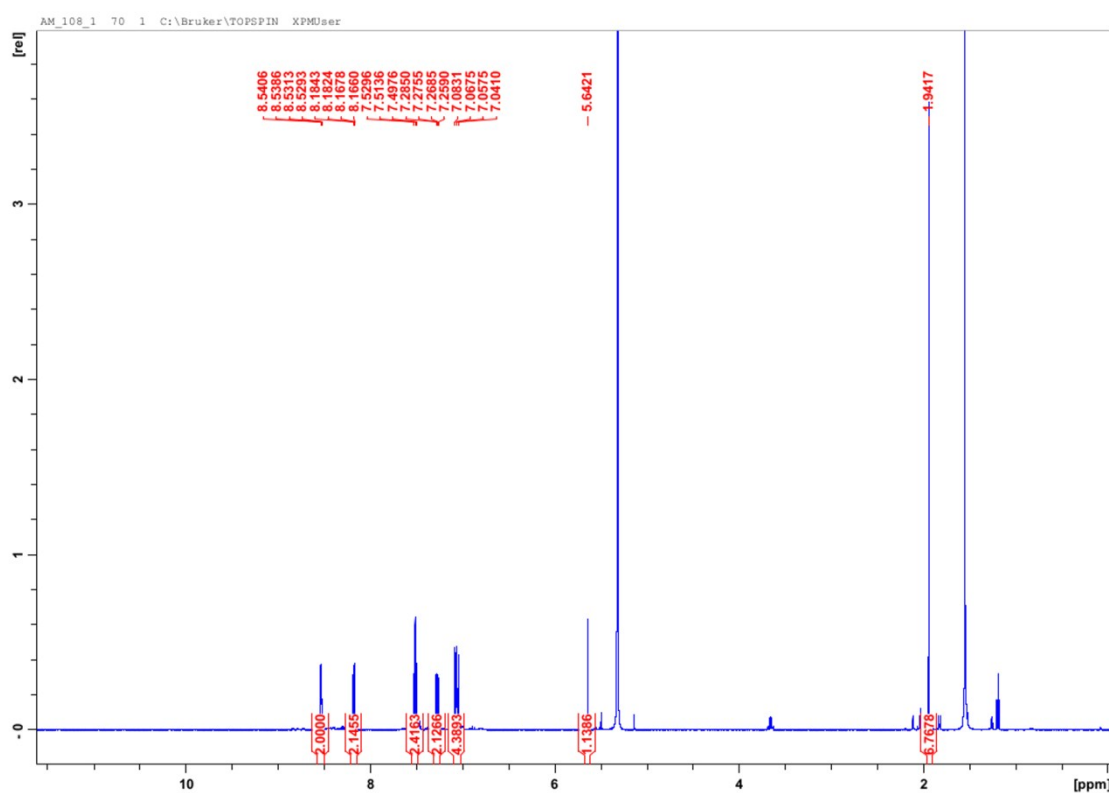
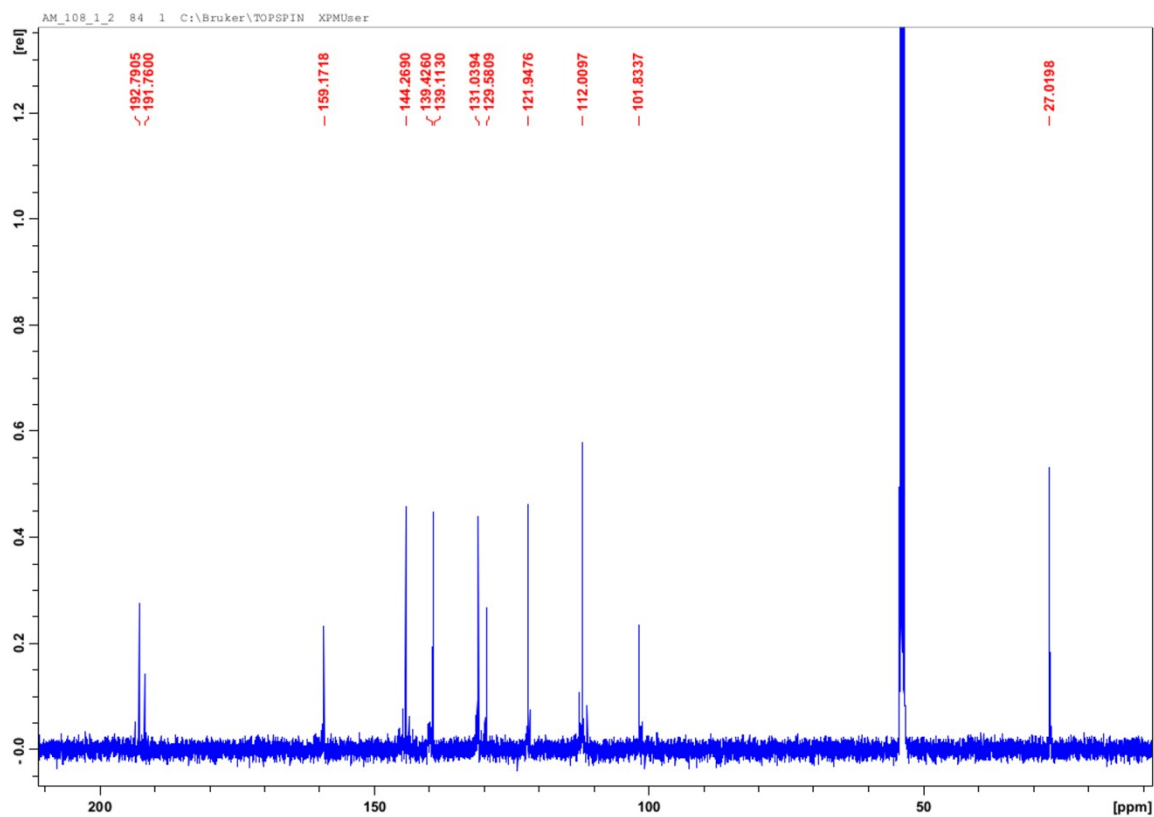
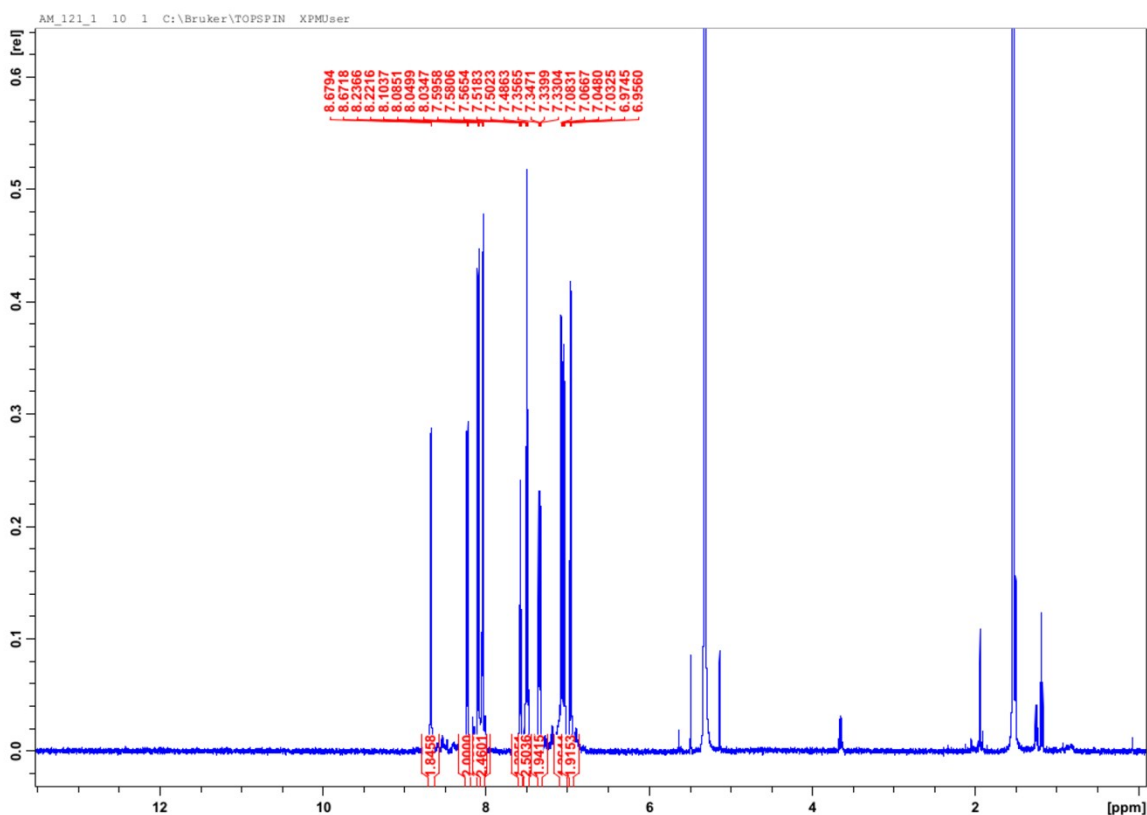
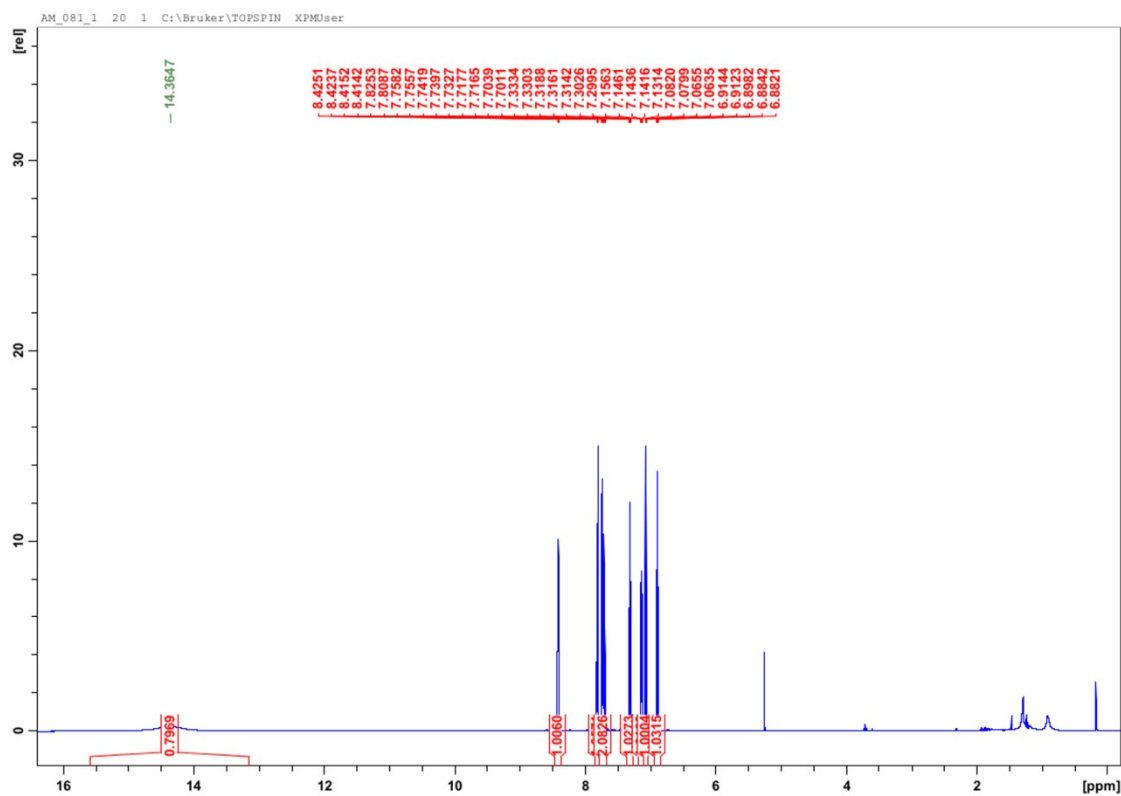
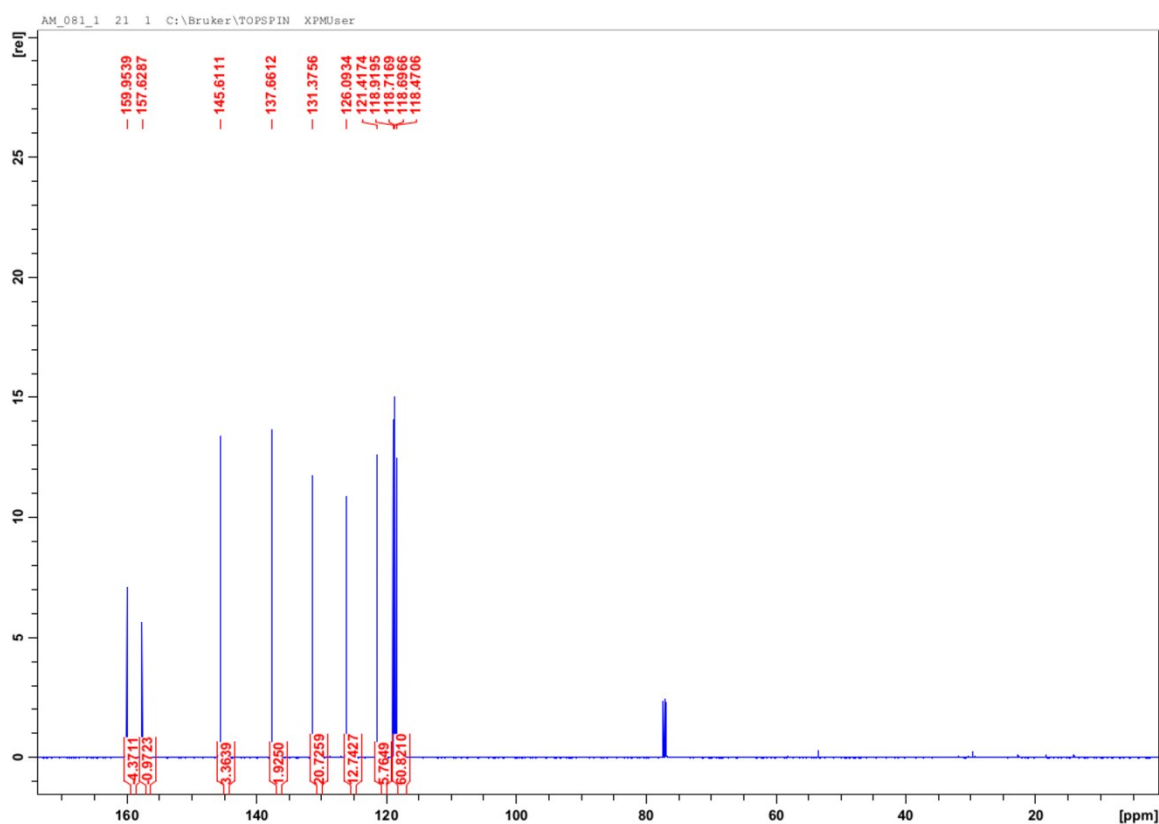
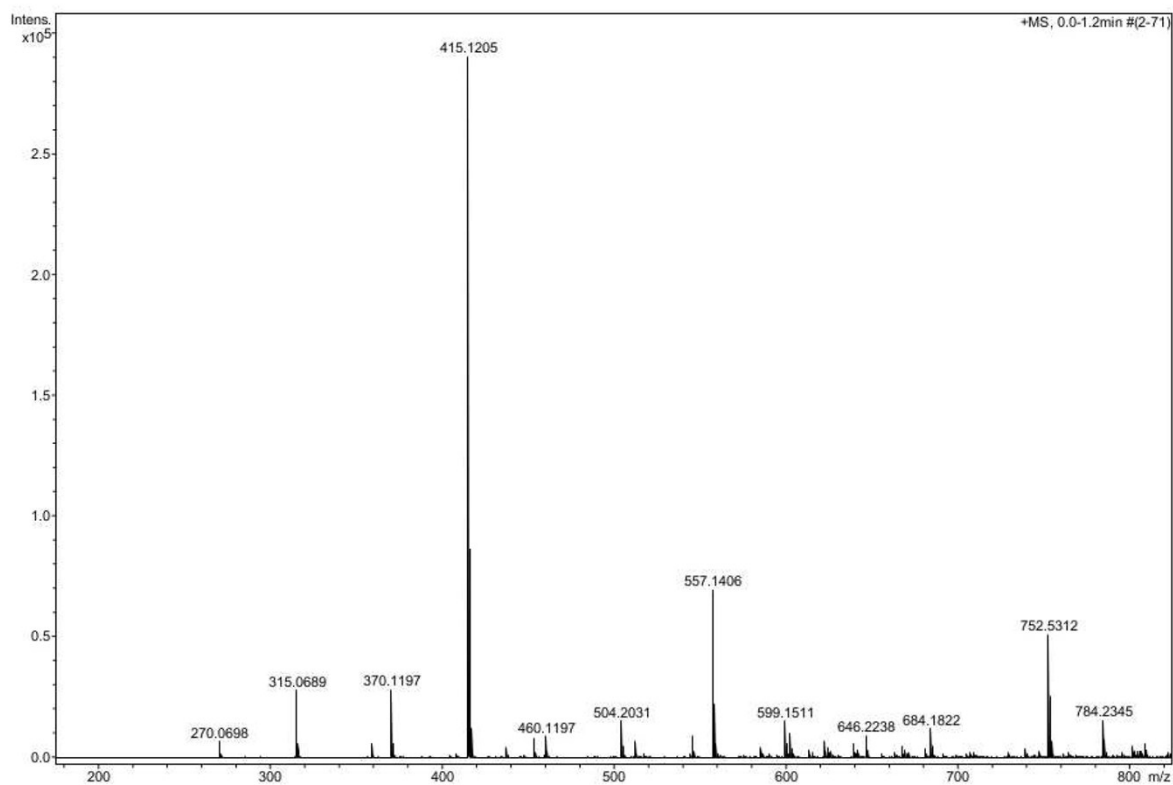
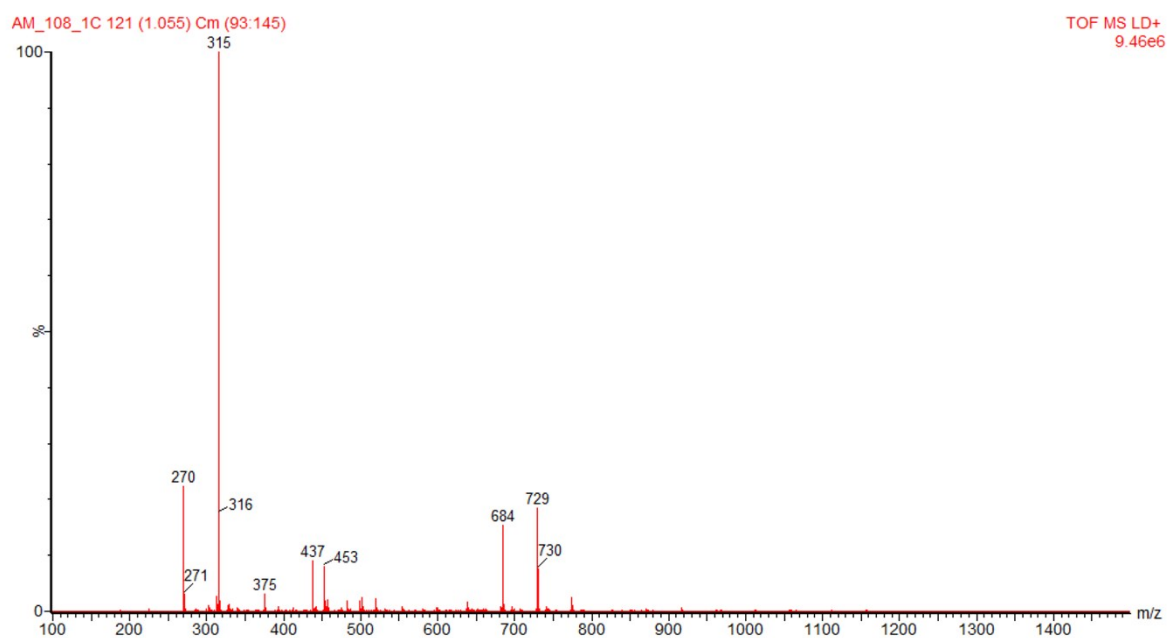


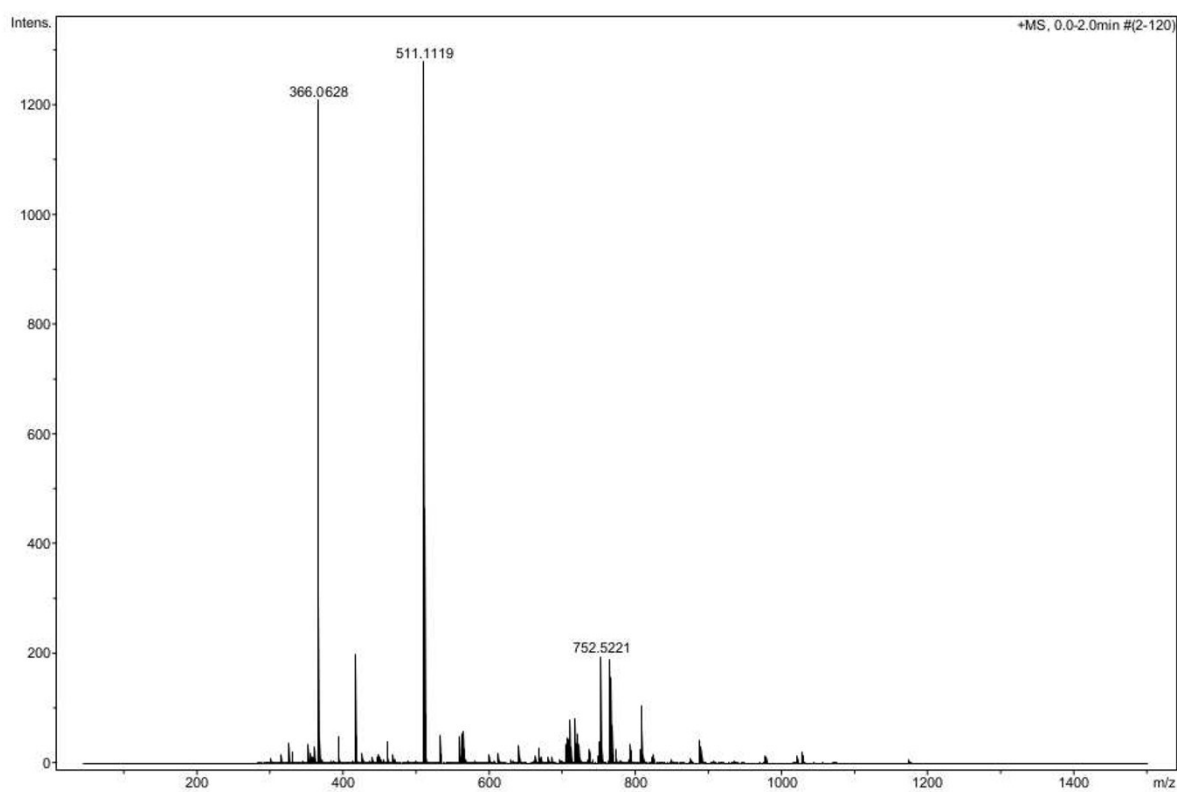
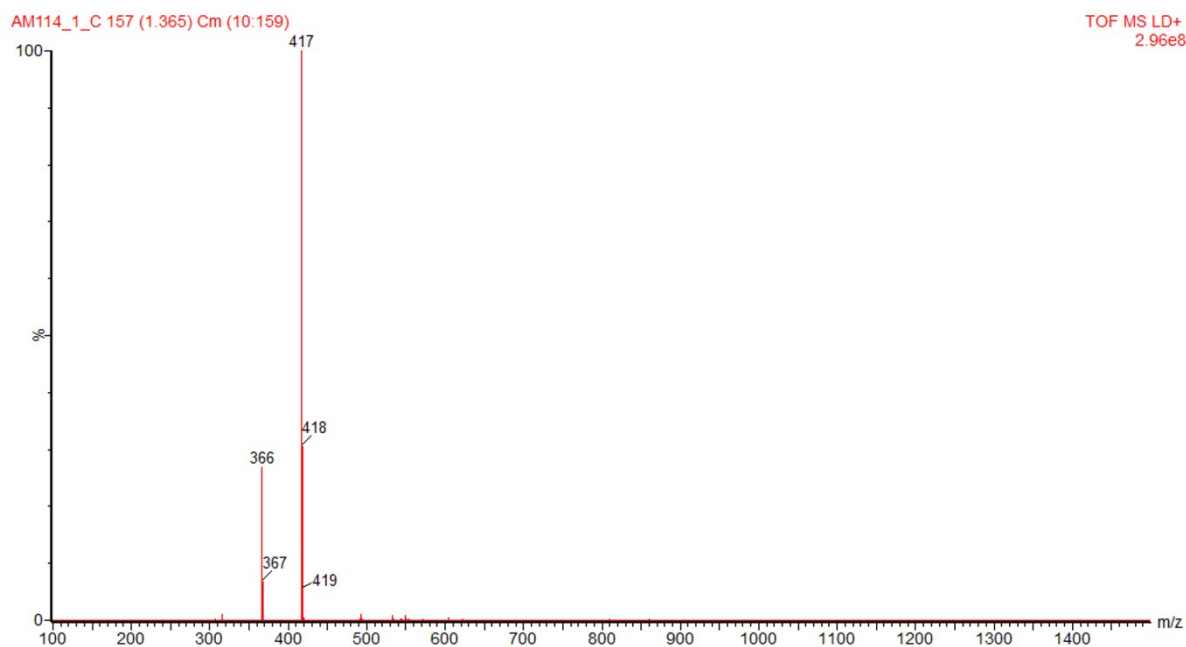
Figure 1. <sup>1</sup>H-NMR of **1**

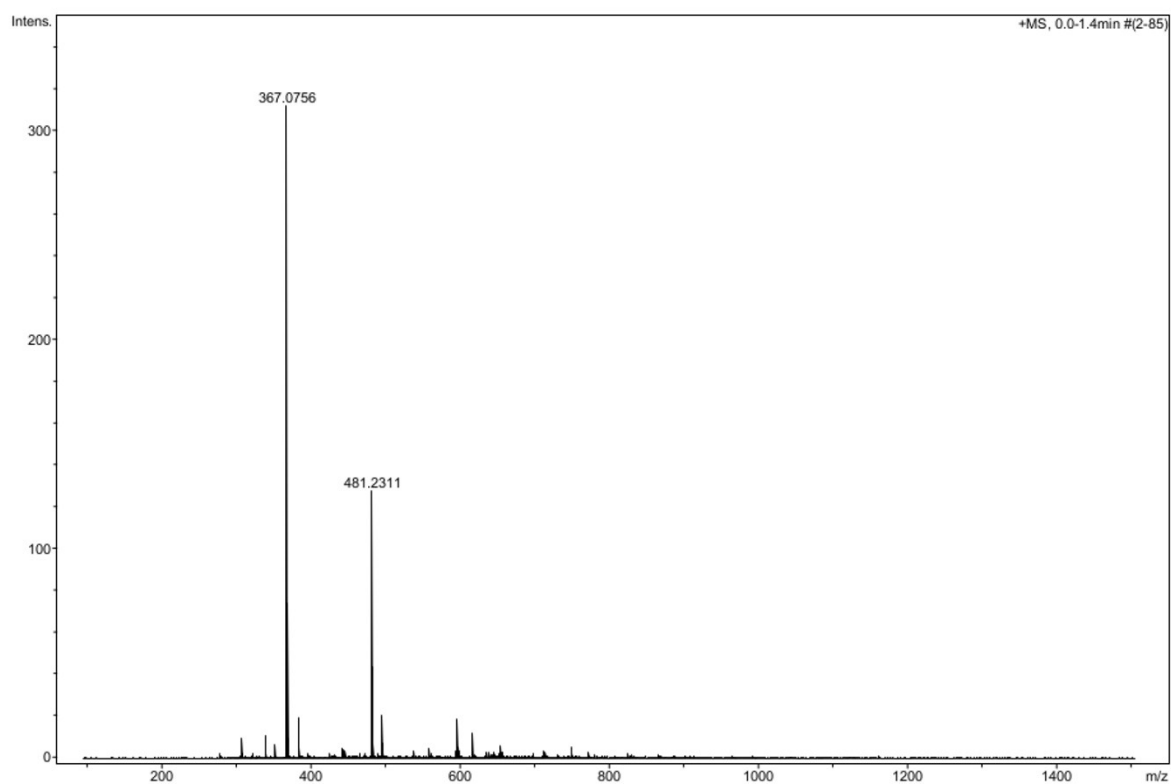
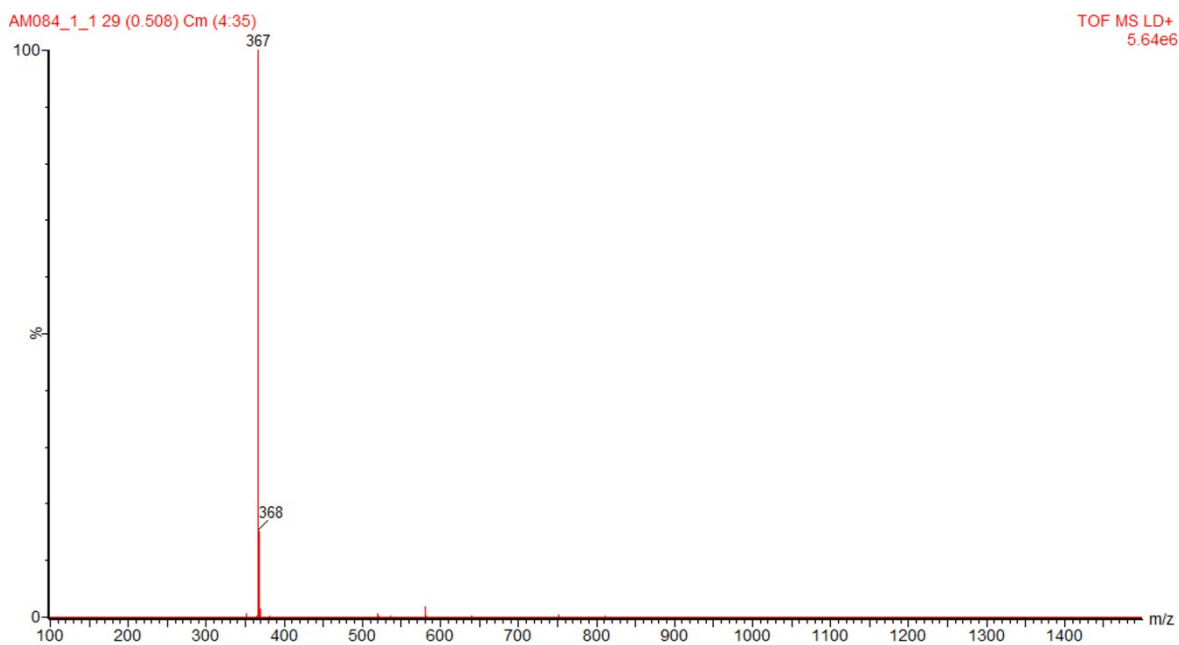
Figure 2.  $^{13}\text{C}$ -NMR of **1**Figure 3.  $^1\text{H}$ -NMR of **2**

Figure 4.  $^1\text{H}$ -NMR of HPPFigure 5.  $^{13}\text{C}$ -NMR of HPP

## MS Spectra

Figure 6. ESI-TOF of **1**Figure 7. MALDI-TOF of **1**

Figure 8. ESI-TOF of **2**Figure 9. MALDI-TOF of **3**

Figure 10. ESI-TOF of **4**Figure 11. MALDI-TOF of **4**

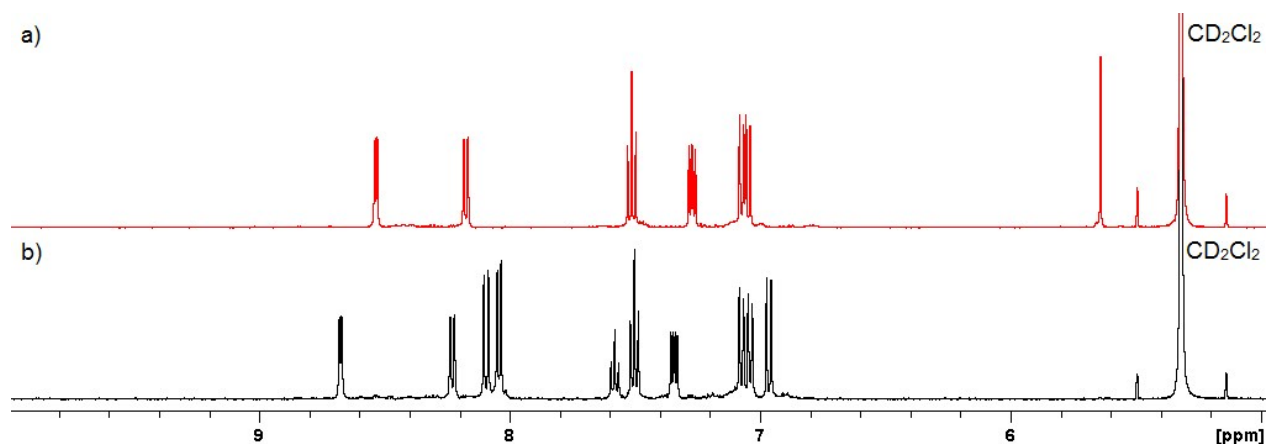


Figure 12.  $^1\text{H}$  NMR spectra of complex **1** (a) and **2** (b) after sublimation in high vacuum ( $10^{-6}$  mbar,  $\approx 250$  °C).

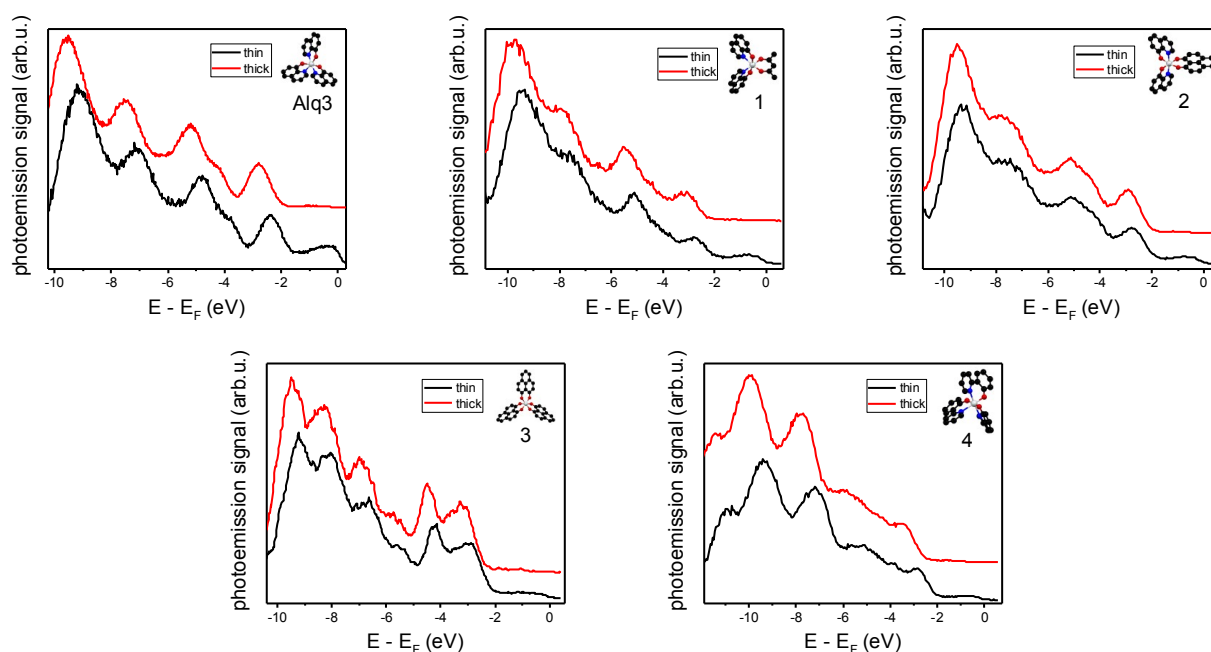


Figure 13. Comparison between the UPS spectra recorded from 1ML molecules on cobalt (black curves, "thin") and the UPS spectra recorded from 4ML molecules on cobalt (red curves, "thick"). The UPS spectra show identical spectral features, that can be reproduced using the eigenvalues from DFT calculations (see Figure 2 in the main article). We take this fact as a strong indication that the molecules in both thin and thick molecular layers on cobalt are intact.