

# Supporting Information

## Synthesis and optoelectronic characterization of Perylene Diimide – Quinoline based small molecules

Stefania Aivali<sup>1</sup>, Loukia. Tsimpouki<sup>1</sup>, C. Anastasopoulos<sup>1,2</sup>, J. K. Kallitsis<sup>1,2\*</sup>

<sup>1</sup> Department of Chemistry, University of Patras, University Campus, Rio-Patras, GR26504, Greece; j.kallitsis@upatras.gr

<sup>2</sup> Foundation for Research and Technology Hellas/Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Platani Str., Patras, GR26504, Greece; j.kallitsis@upatras.gr

\* Correspondence: j.kallitsis@upatras.gr;

### <sup>1</sup>H, <sup>13</sup>C NMR and ATR-IR spectra of the synthesized molecules

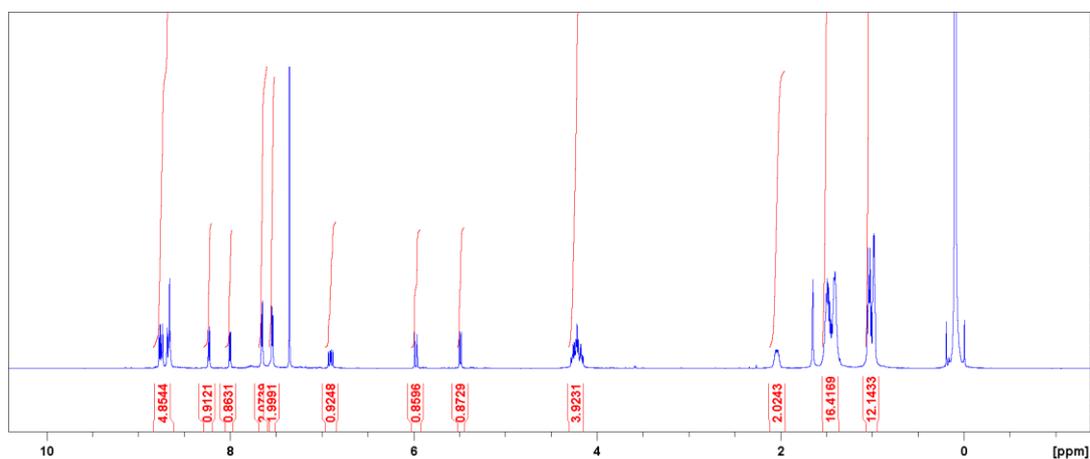


Figure S1. <sup>1</sup>H NMR spectrum of styryl-di-EH-PDI in CDCl<sub>3</sub>.

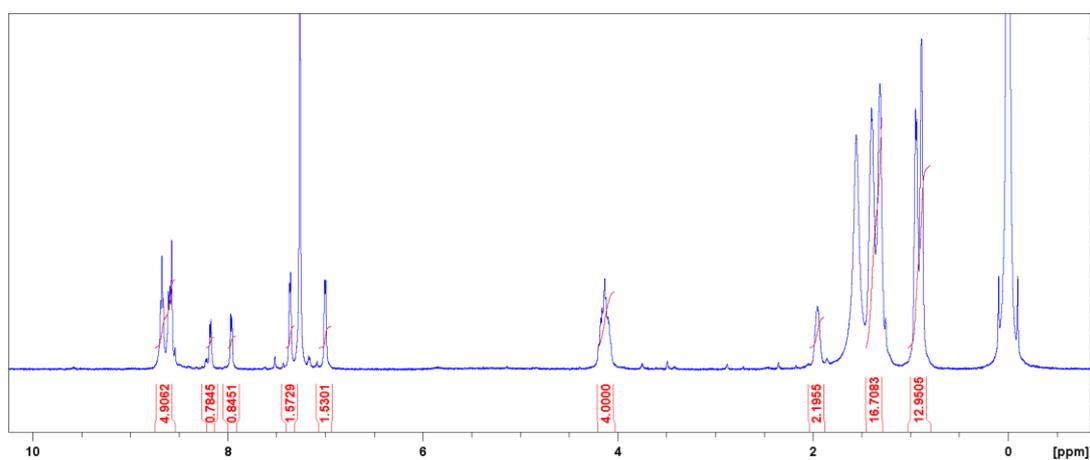


Figure S2. <sup>1</sup>H NMR spectrum of PhOH-di-EH-PDI in CDCl<sub>3</sub>.

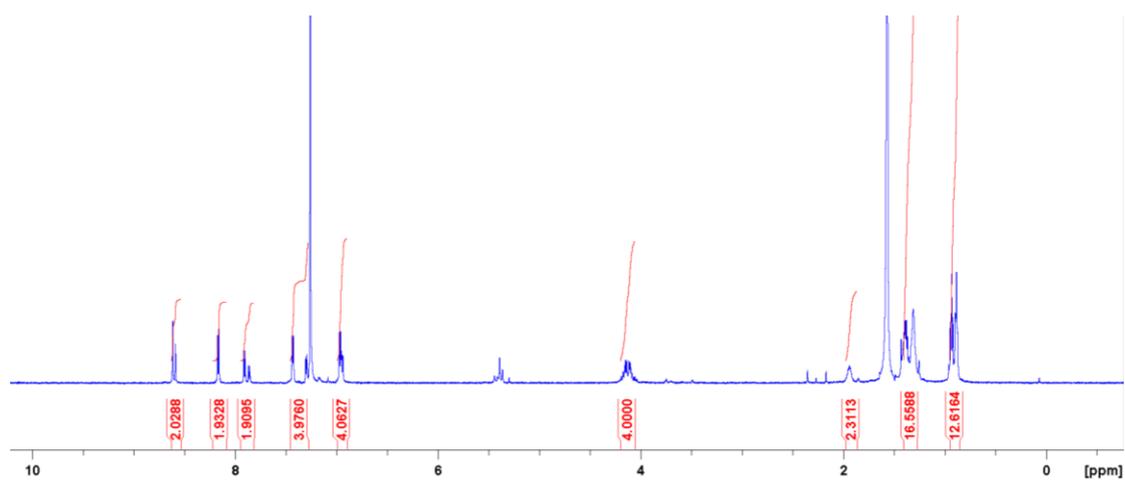


Figure S3.  $^1\text{H}$  NMR spectrum of diPhOH-di-EH-PDI in  $\text{CDCl}_3$ .

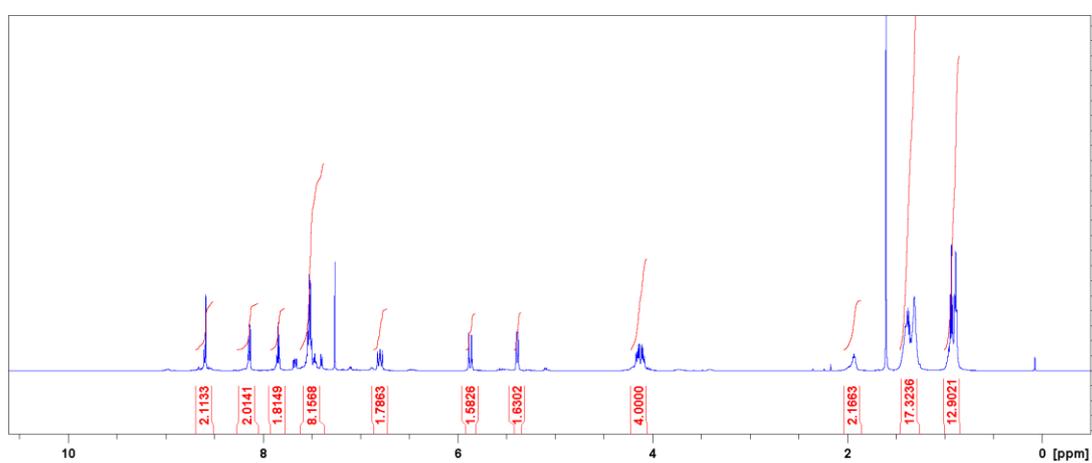


Figure S4.  $^1\text{H}$  NMR spectrum of distyryl-di-EH-PDI in  $\text{CDCl}_3$ .

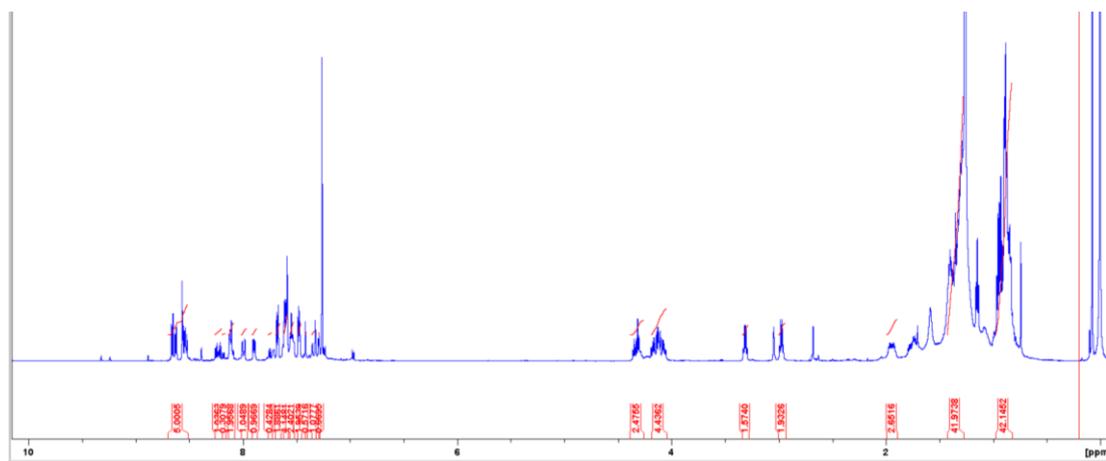


Figure S5.  $^1\text{H}$  NMR spectrum of 5FQ-styryl-di-EH-PDI in  $\text{CDCl}_3$ .

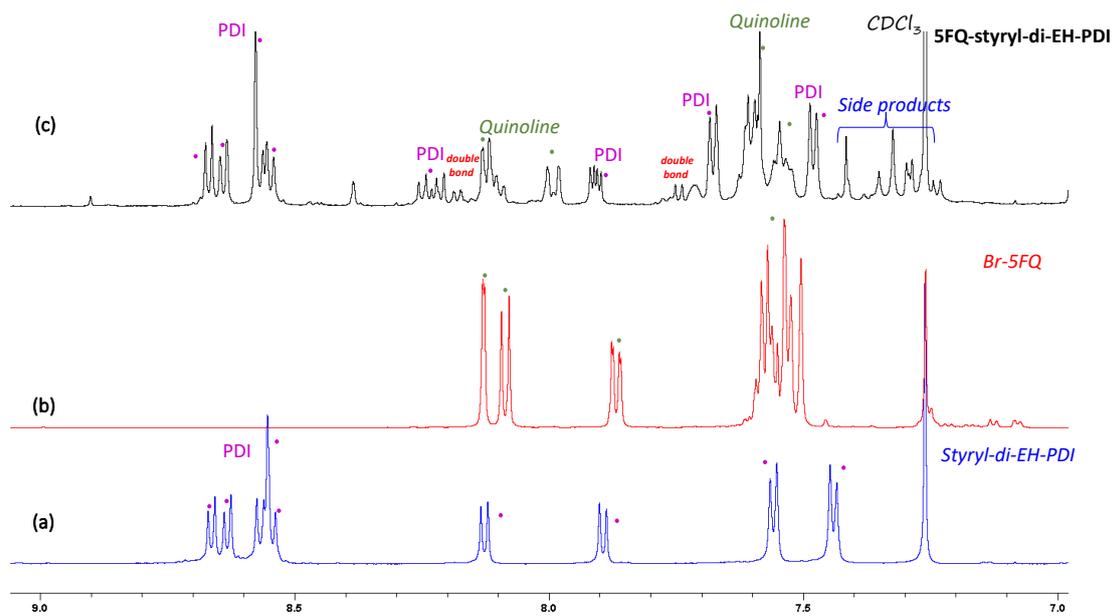


Figure S6: Enlarged aromatic region of  $^1\text{H}$  NMR spectrum of 5FQ-styryl-di-EH-PDI in  $\text{CDCl}_3$ .

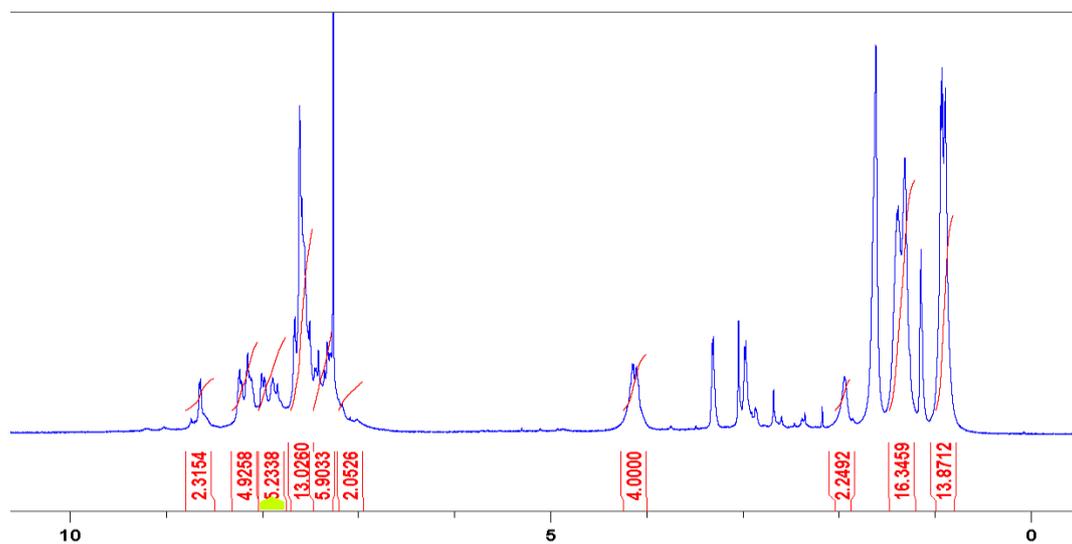


Figure S7.  $^1\text{H}$  NMR spectrum of di5FQ-styryl-di-EH-PDI in  $\text{CDCl}_3$ .

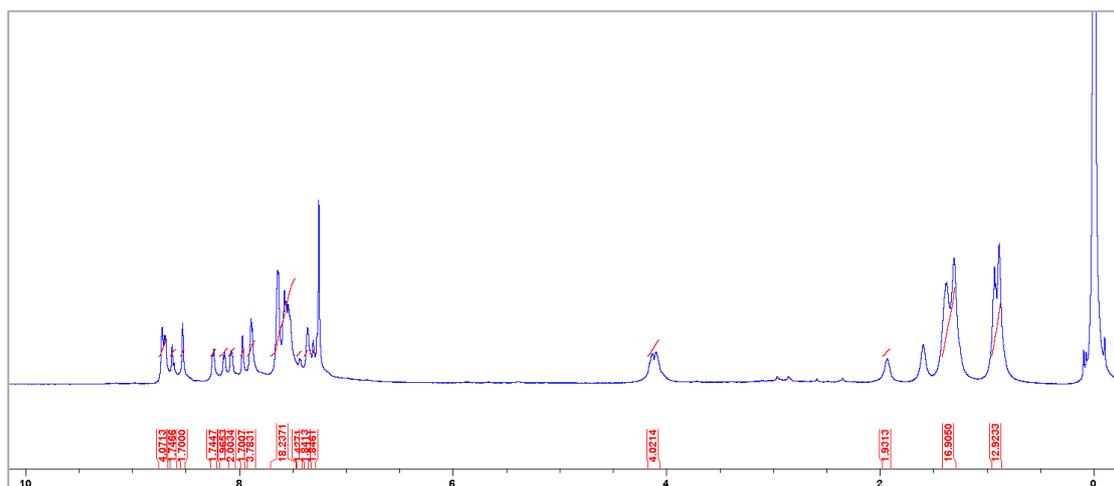


Figure S8.  $^1\text{H}$  NMR spectrum of diQPy-styryl-di-EH-PDI in  $\text{CDCl}_3$ .

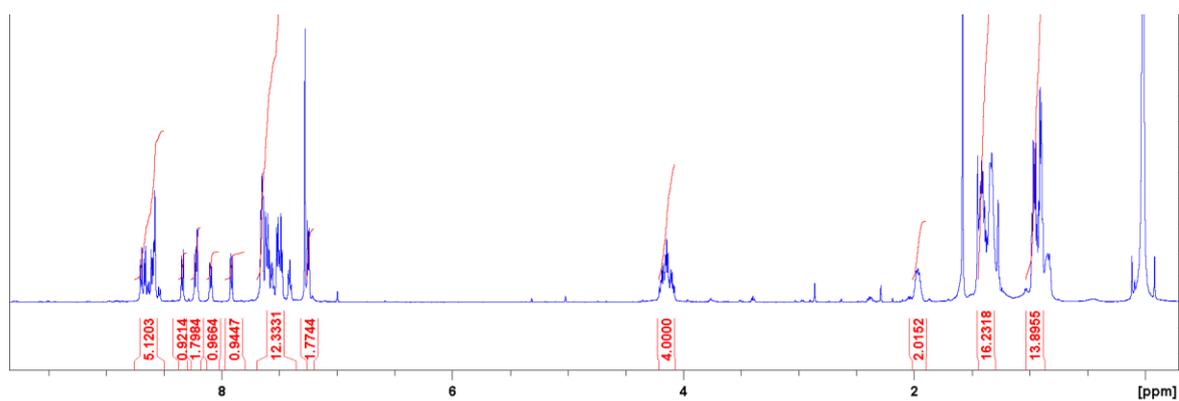


Figure S9.  $^1\text{H}$  NMR spectrum of Ph5FQ-PhO-di-EH-PDI in  $\text{CDCl}_3$ .

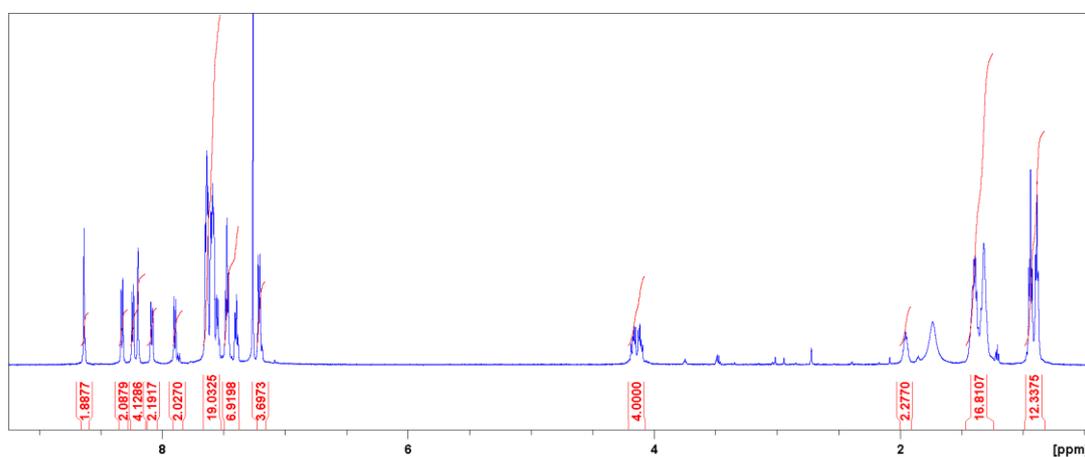


Figure S10.  $^1\text{H}$  NMR spectrum of diPh5FQ-PhO-di-EH-PDI in  $\text{CDCl}_3$ .

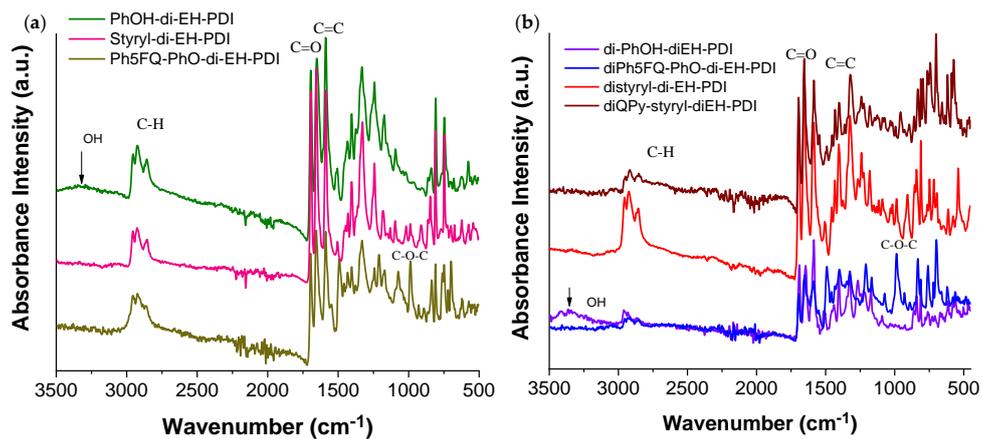


Figure S11. ATR-IR spectra of mono substituted perylene diimides and (b) ATR-IR spectra of disubstituted perylene diimides.

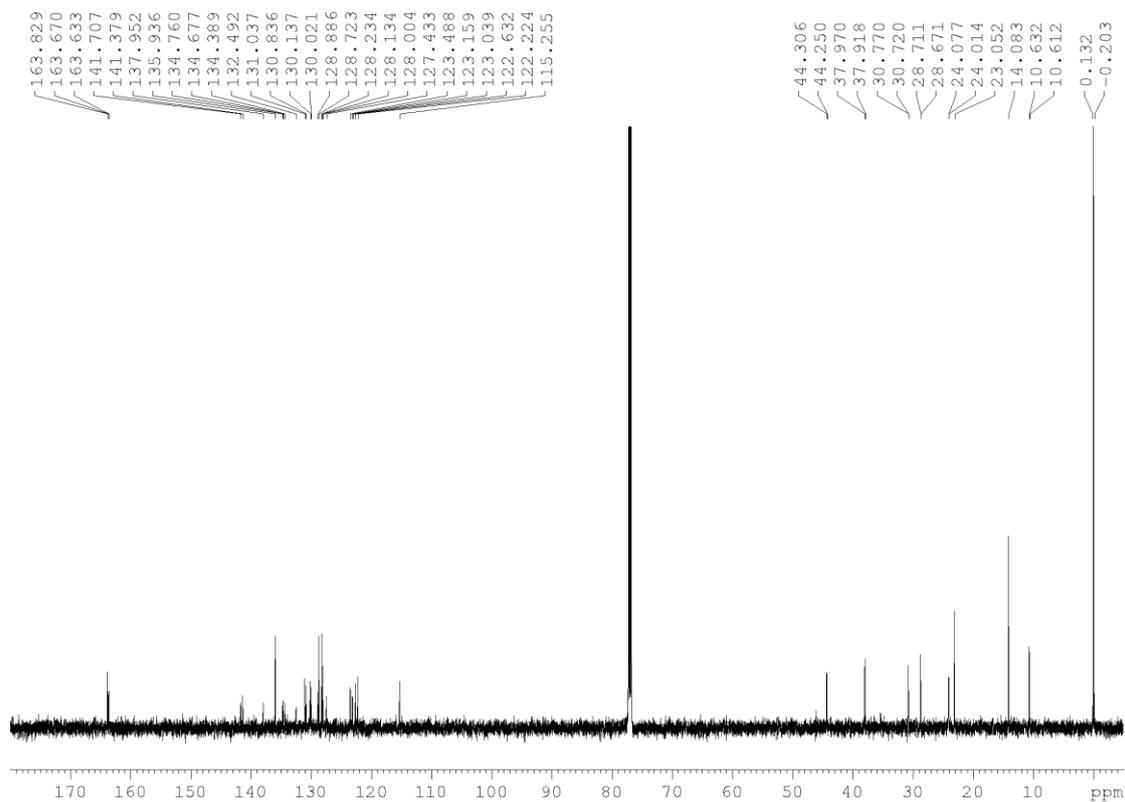


Figure S12.  $^{13}\text{C}$  NMR spectrum of styryl-di-EH-PDI in  $\text{CDCl}_3$ .

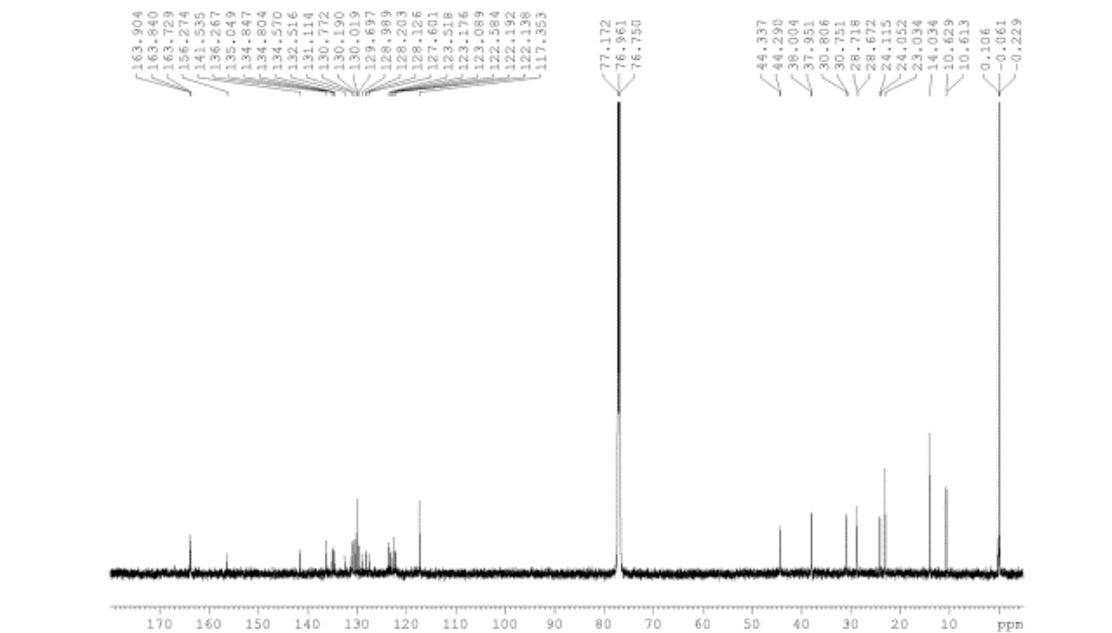


Figure S13.  $^{13}\text{C}$  NMR spectrum of PhOH-di-EH-PDI in  $\text{CDCl}_3$ .

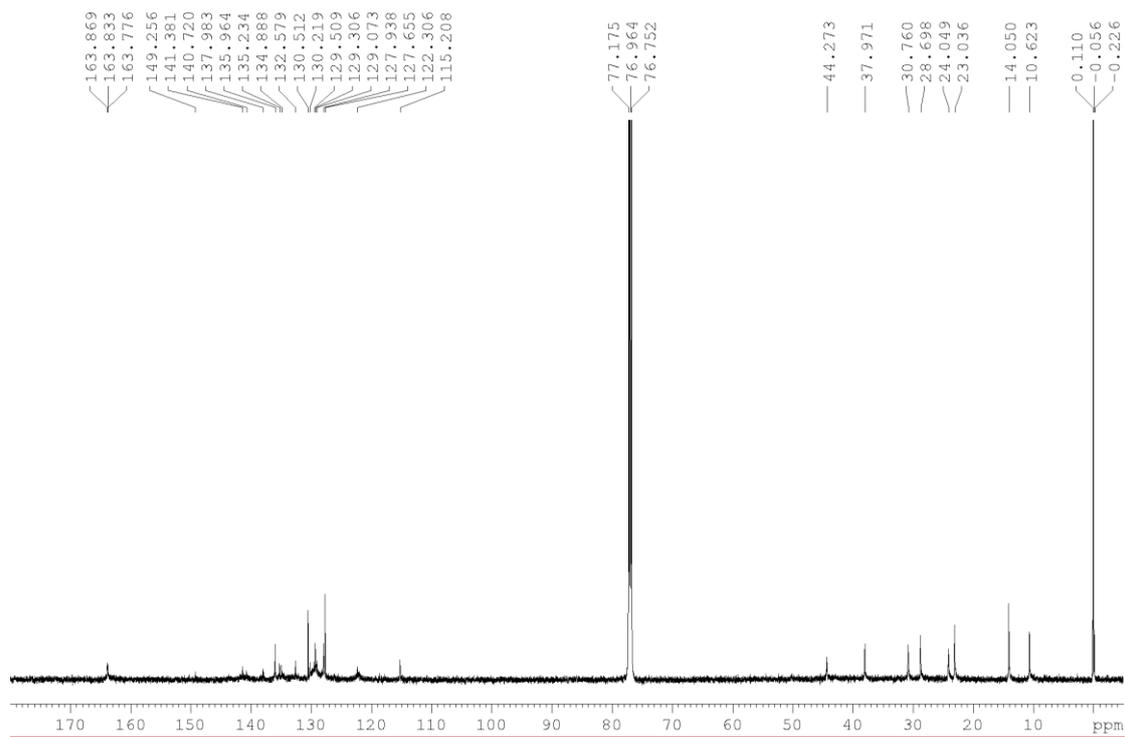


Figure S14. <sup>13</sup>C NMR spectrum of distyryl-di-EH-PDI in CDCl<sub>3</sub>.

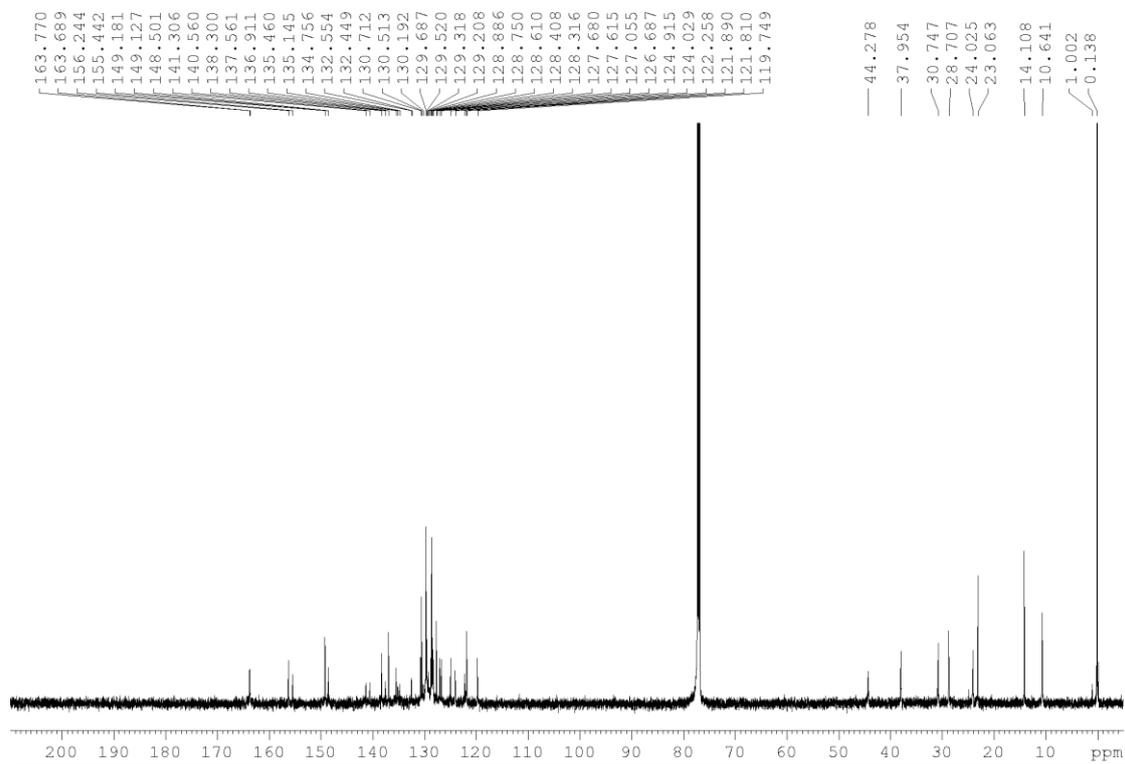
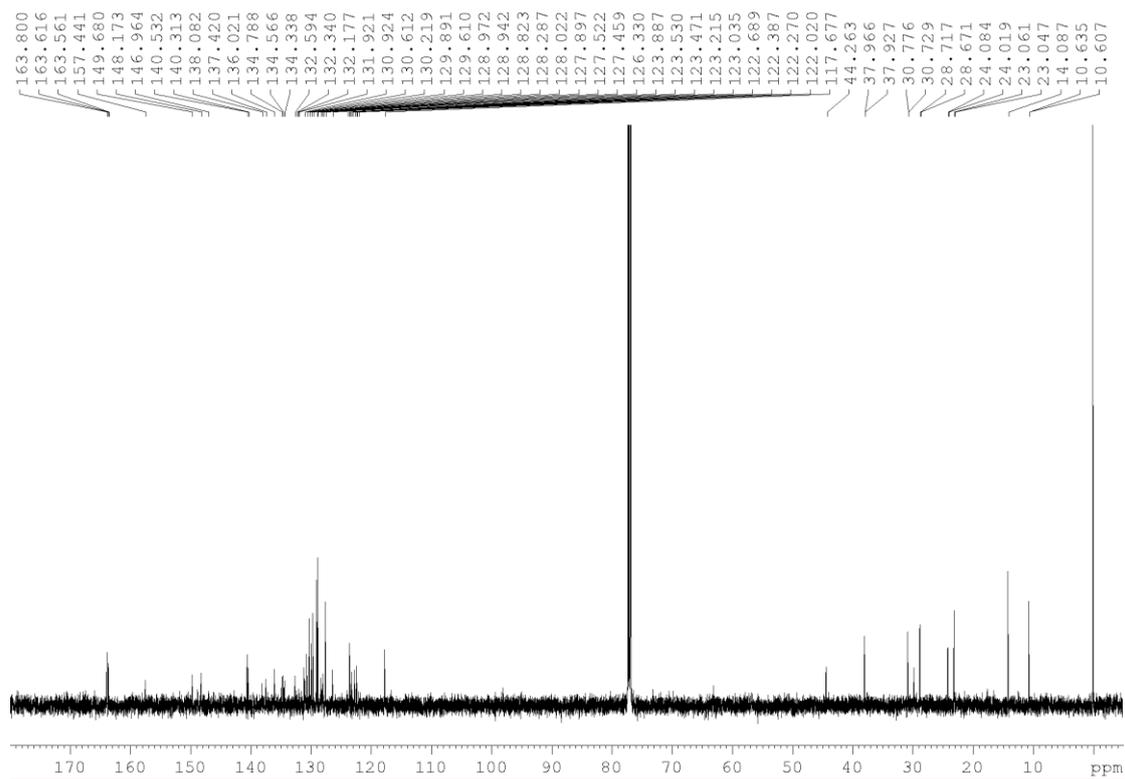
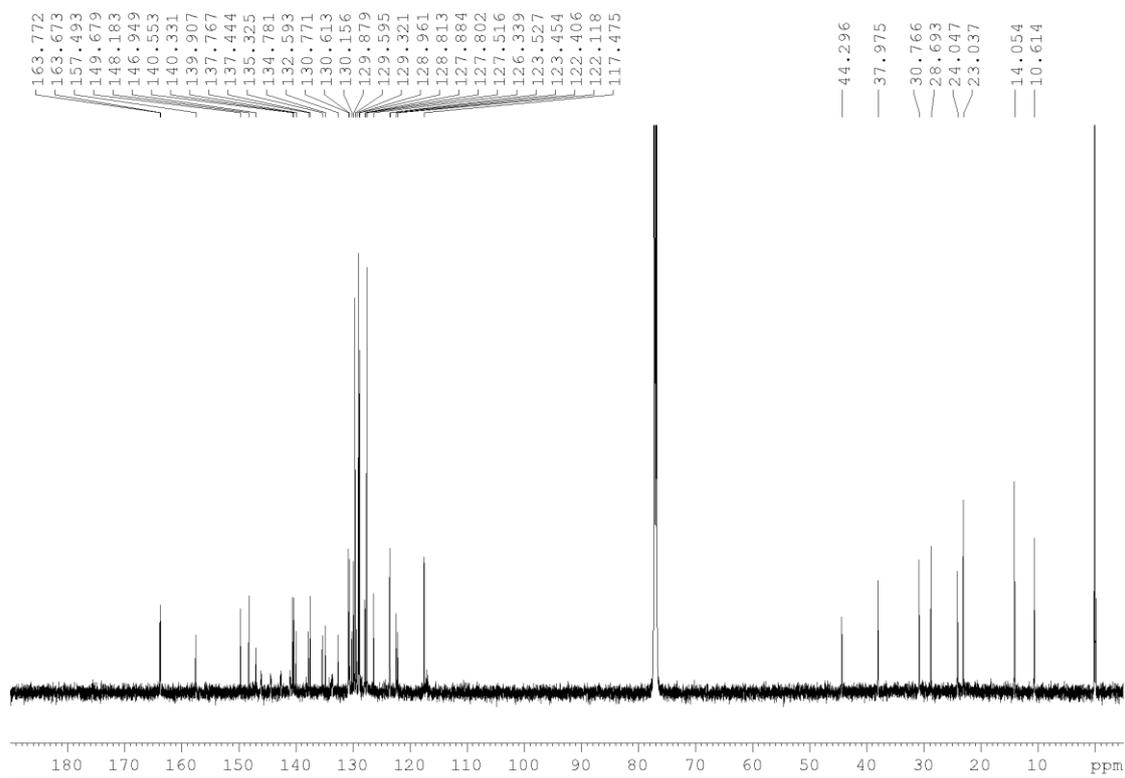


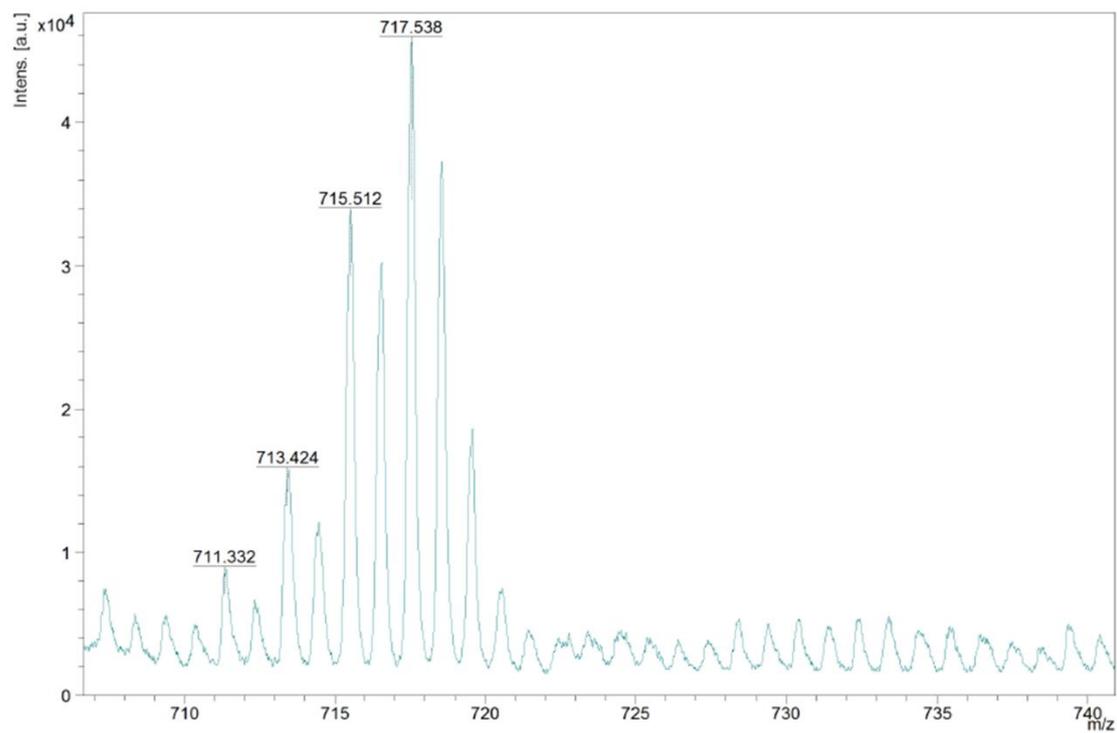
Figure S15. <sup>13</sup>C NMR spectrum of diQPy-styryl-di-EH-PDI in CDCl<sub>3</sub>.



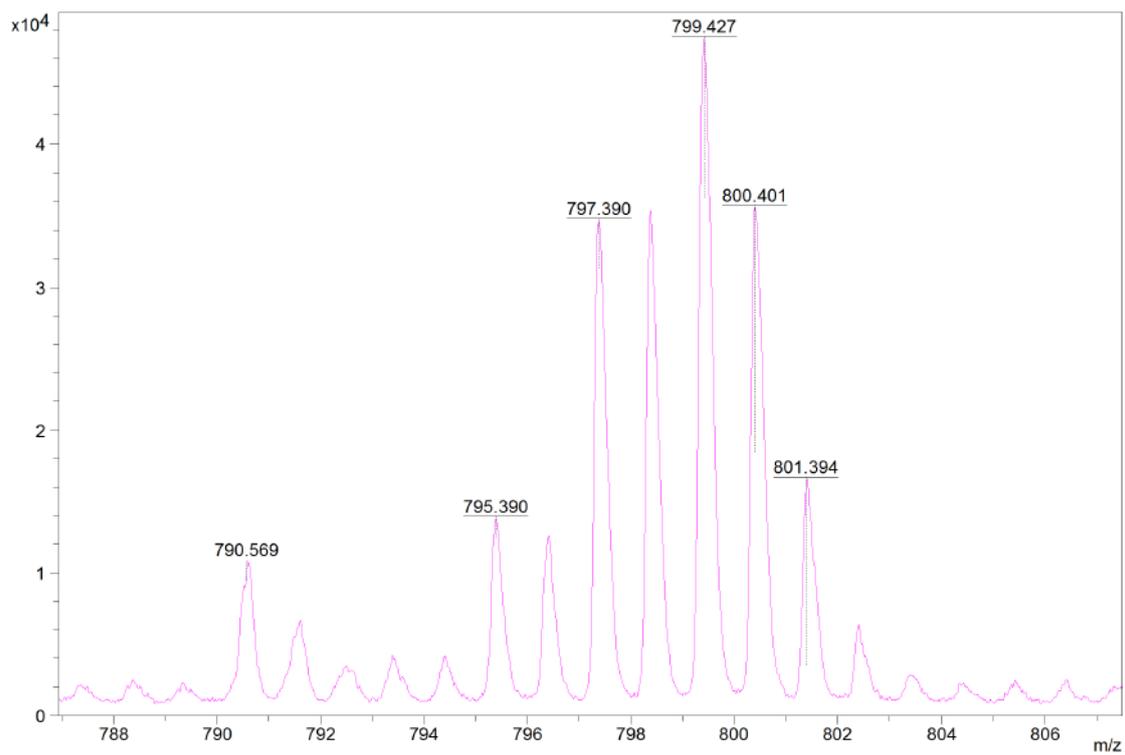
**Figure S16.**  $^{13}\text{C}$  NMR spectrum of Ph5FQ-PhO-di-EH-PDI in  $\text{CDCl}_3$ .



**Figure S17.**  $^{13}\text{C}$  NMR spectrum of diPh5FQ-PhO-di-EH-PDI in  $\text{CDCl}_3$ .



**Figure S18** MALDI Spectrum of styryl-di-EH-PDI.



**Figure S19.** MALDI Spectrum of diPhOH-di-EH-PDI.

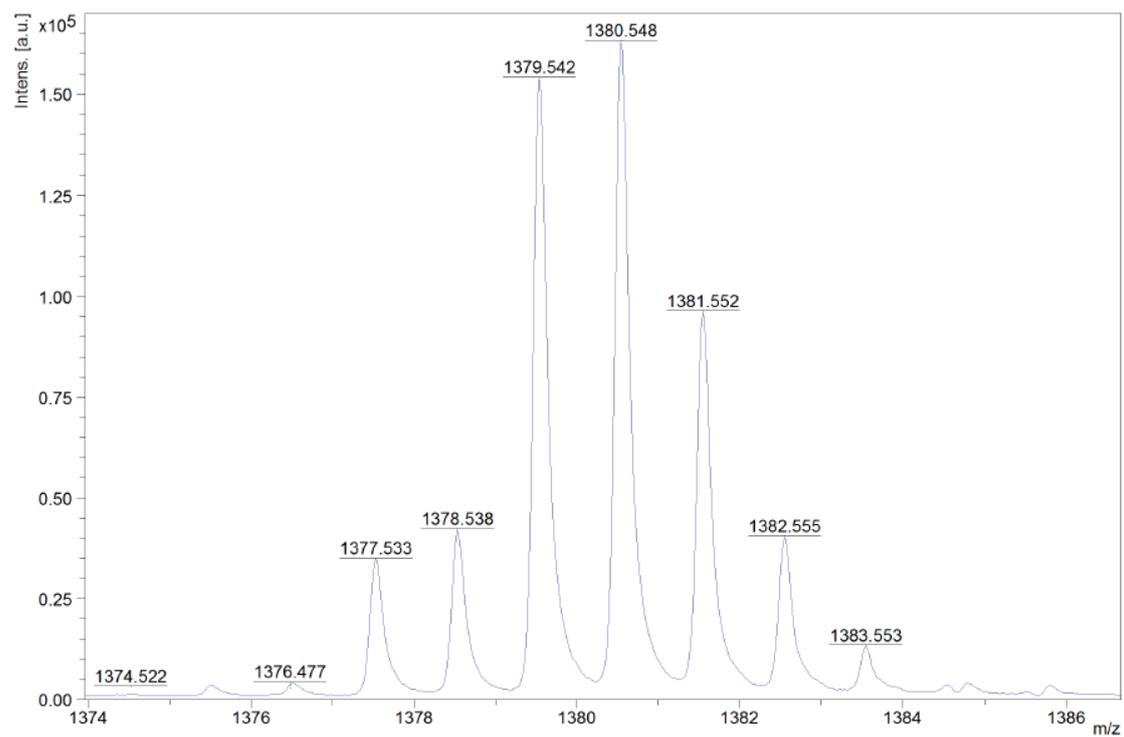


Figure S20. MALDI Spectrum of diQPpy-styryl-di-EH-PDI.

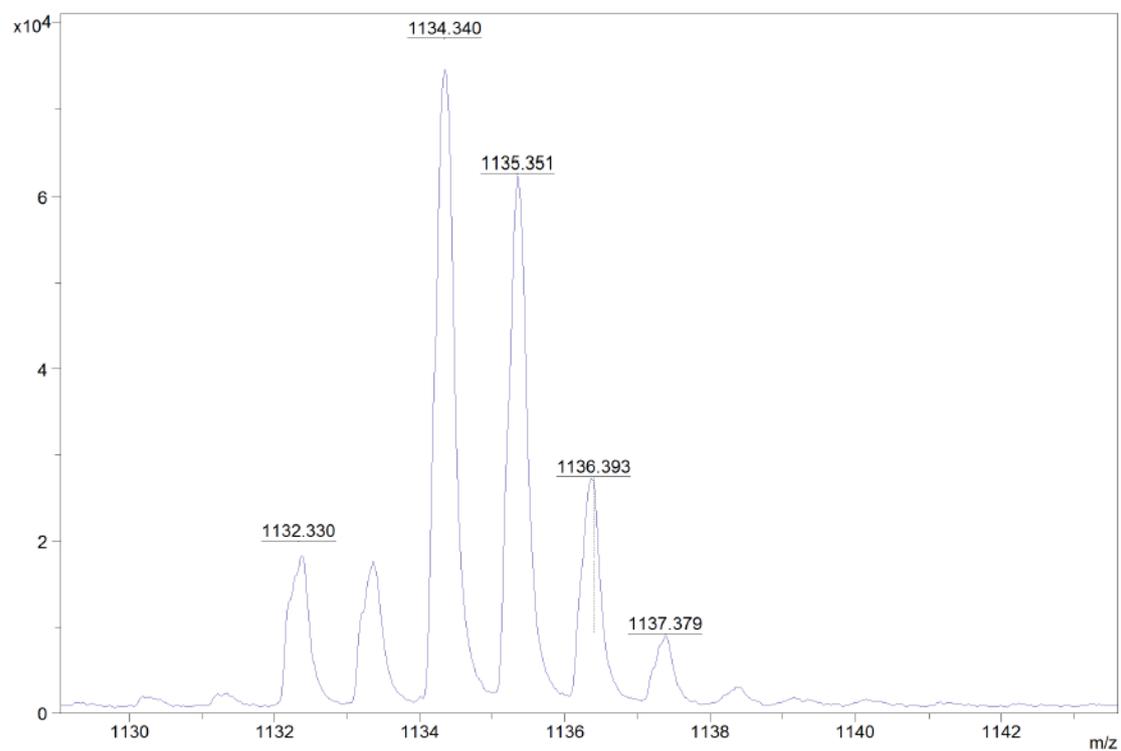
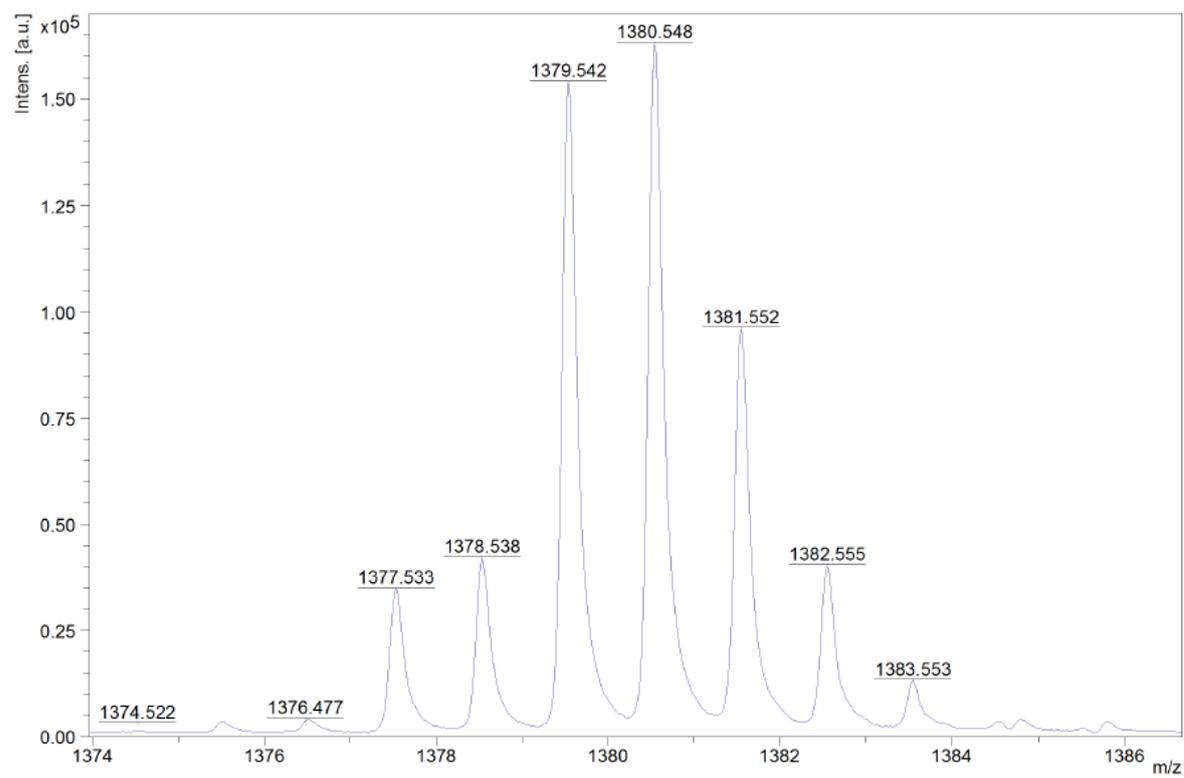


Figure S21. MALDI Spectrum of Ph5FQ-PhO-di-EH-PDI.



**Figure S22.** MALDI spectrum of diPh5FQ-PhO-di-EH-PDI.