Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

New Pyrene Cored Small Organic Molecule with Flexible Alkyl Spacer: The Potential Solution Processable Blue Emitter with Bright Photoluminescence

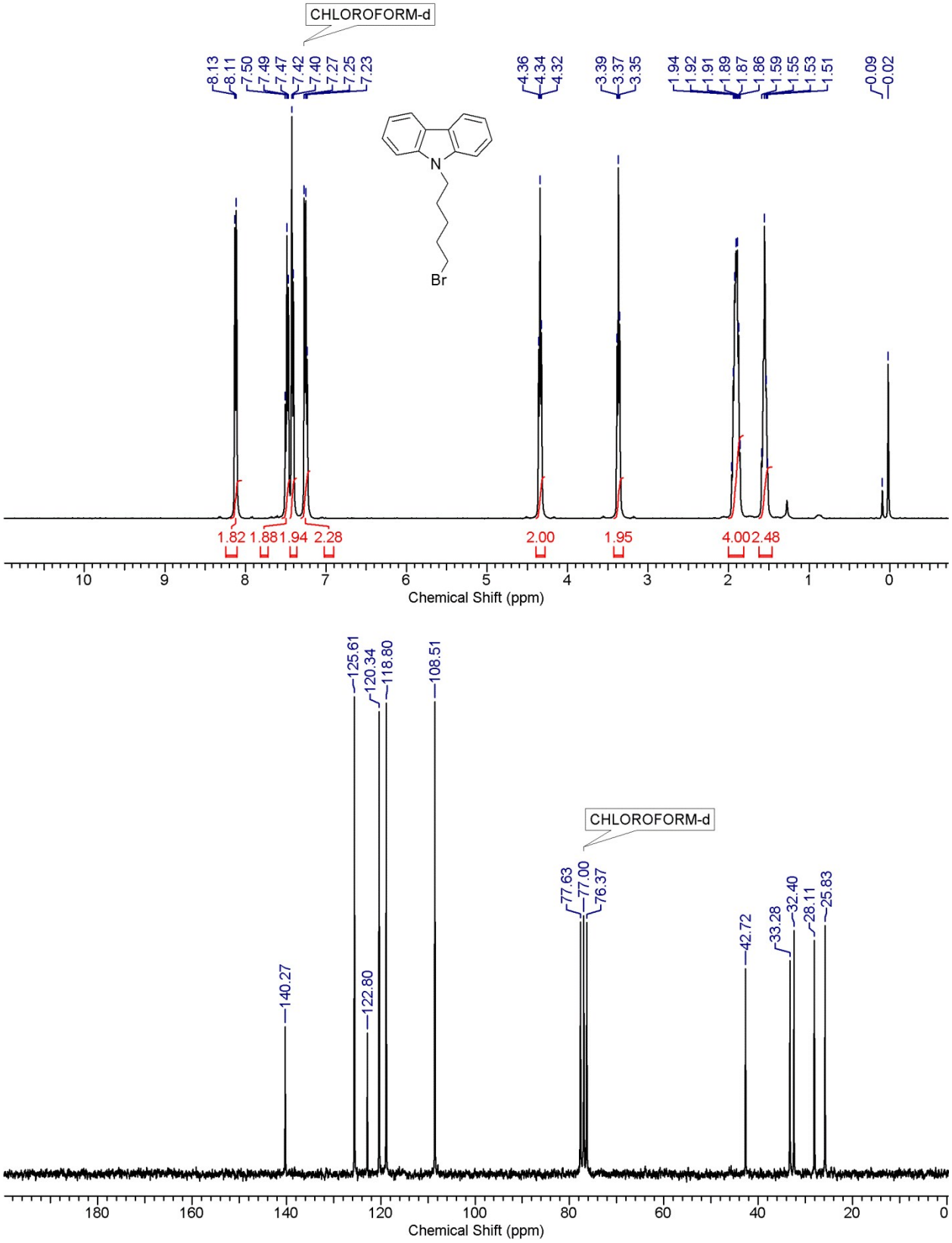

Fig. S1. ^{1}H (upper) and ^{13}C NMR (lower) spectra of 9-(5-bromopentyl)-9H-carbazole

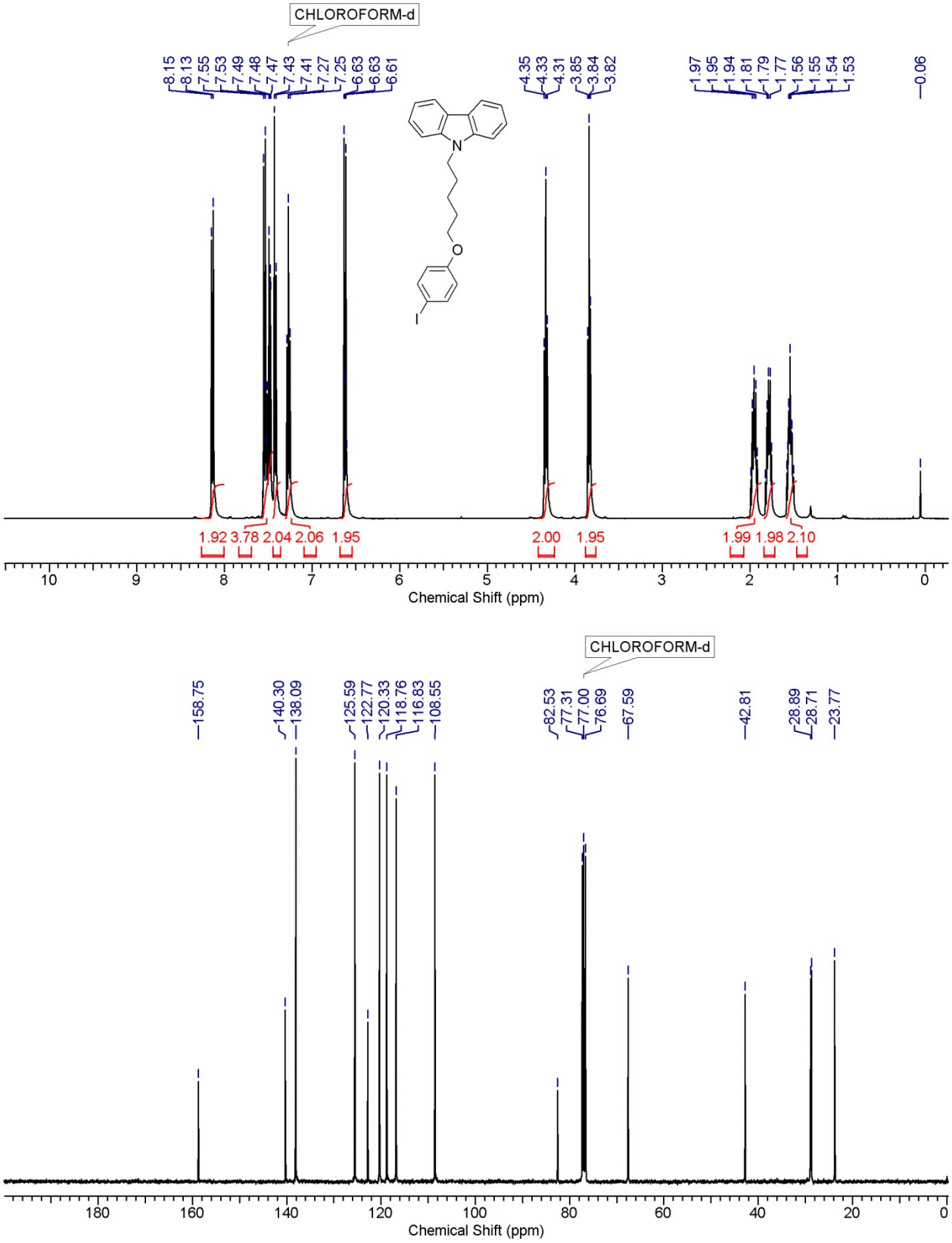

Fig. S2. ^{1}H (upper) and ^{13}C NMR (lower) spectra of 9-(5-(4-iodophenoxy)pentyl)-9H-carbazole

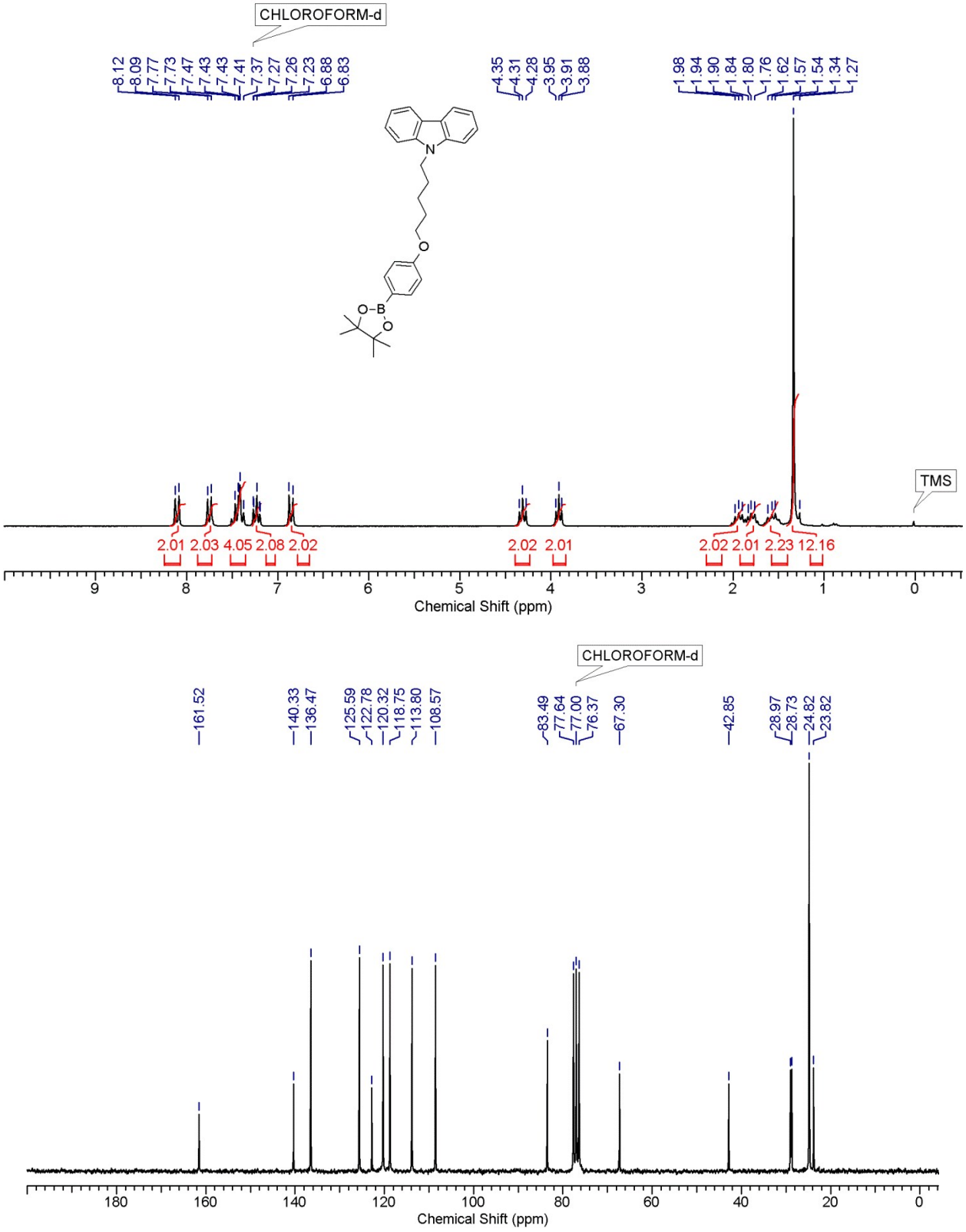

Fig. S3. ^{1}H (upper) and ^{13}C NMR (lower) spectra of 9-(5-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenoxy)pentyl)-9H-carbazole

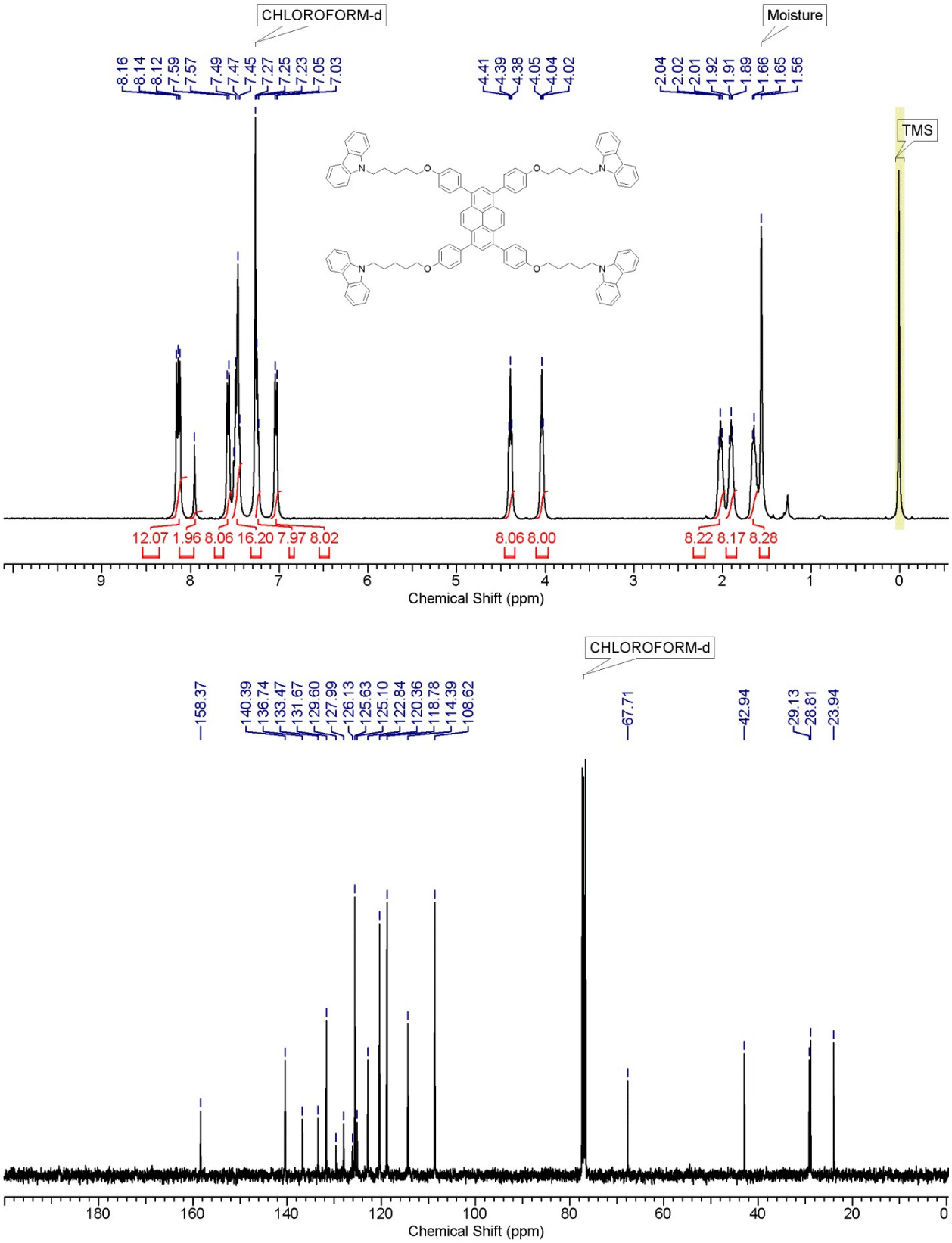

Fig. S4. ^{1}H (upper) and ^{13}C NMR (lower) spectra of 1,3,6,8-tetrakis(4-((5-(9H-carbazol-9-yl)pentyl)oxy)phenyl)pyrene (**PY-II**)

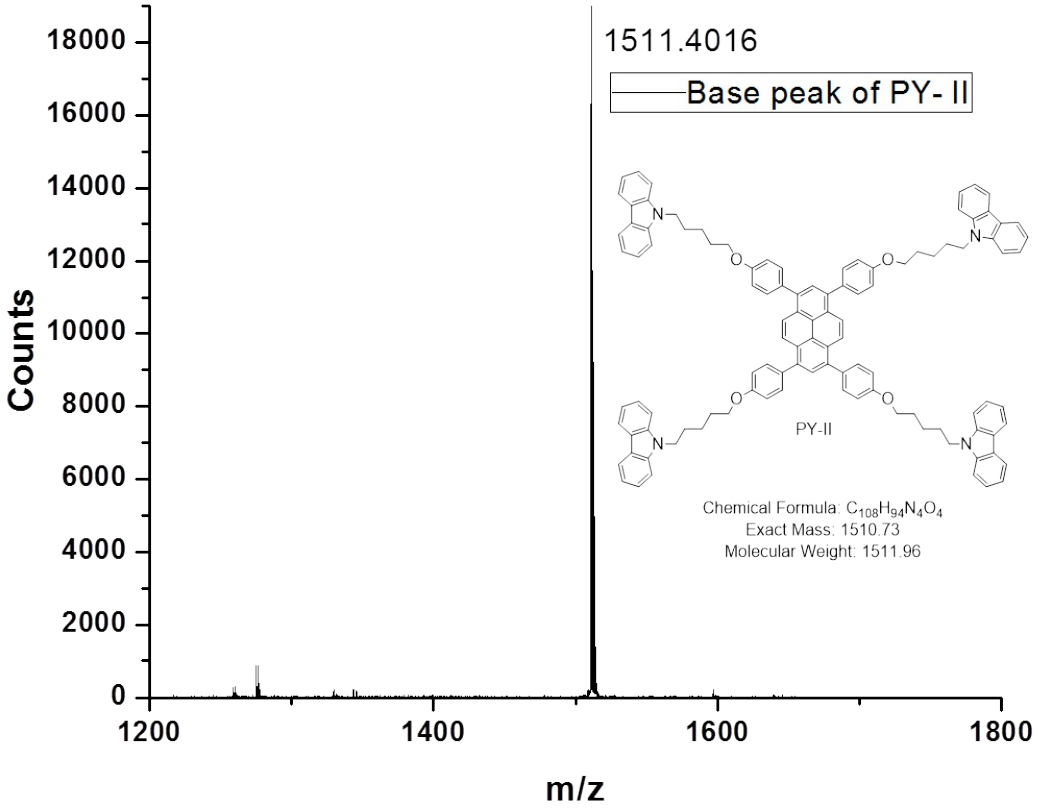

Fig. S5. MALDI-TOF spectrum of **PY-II**

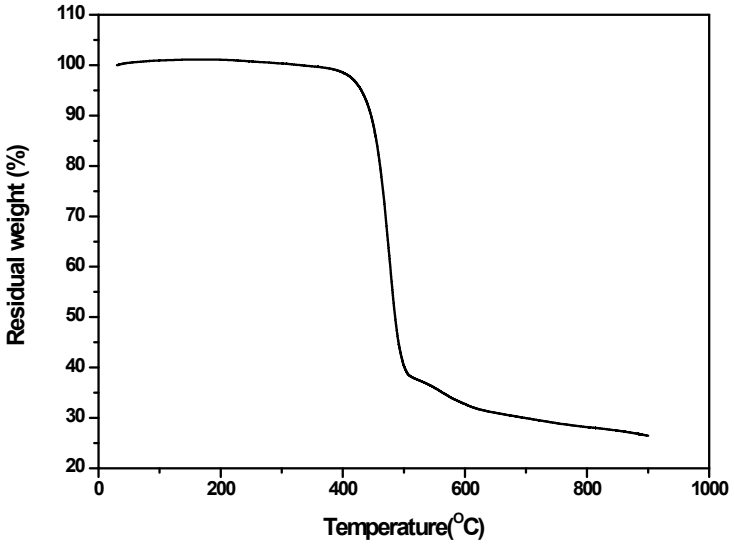

Fig.S6 TGA curve of **PY-II**

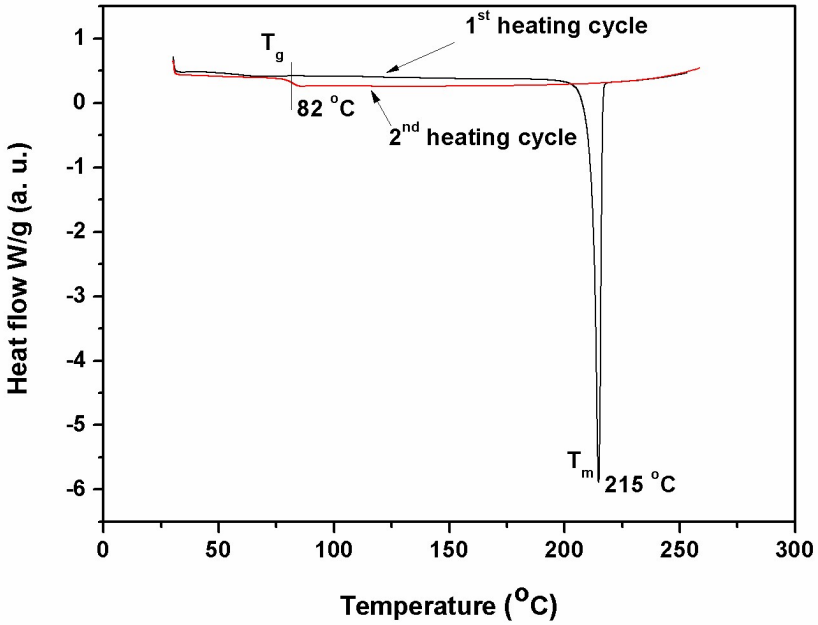

Fig. S7 DSC curve of **PY-II**

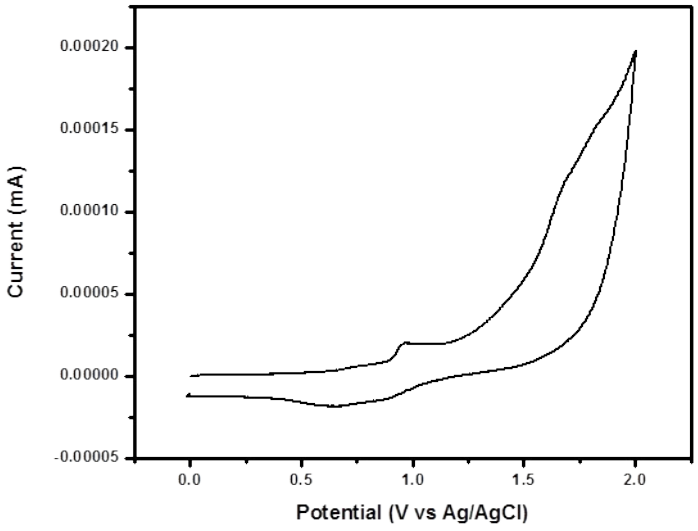

Fig. S8 Cyclic voltammogram of **PY-II**

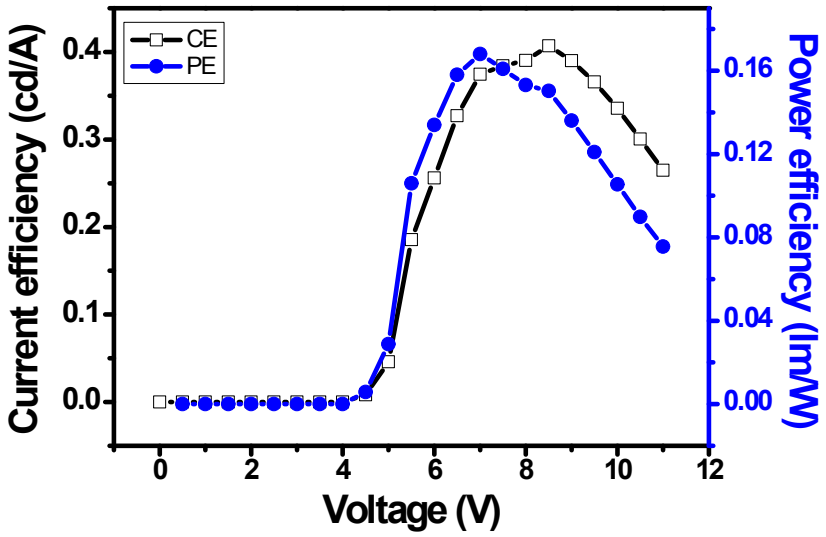

Fig. S9 CE and PE characteristics of **PY-II based OLED** devices.

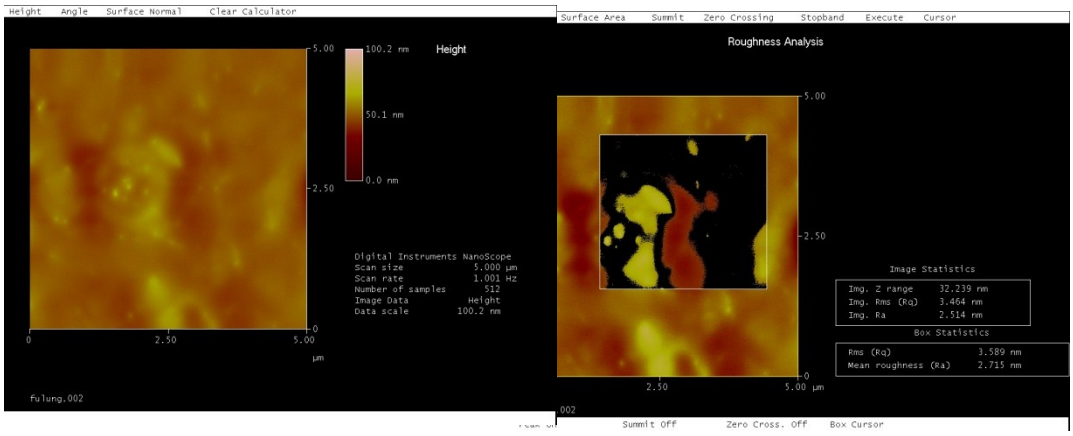

Fig. S10 Atomic force microscope image of **PY-II** spin coated thin film on ITO coated glass

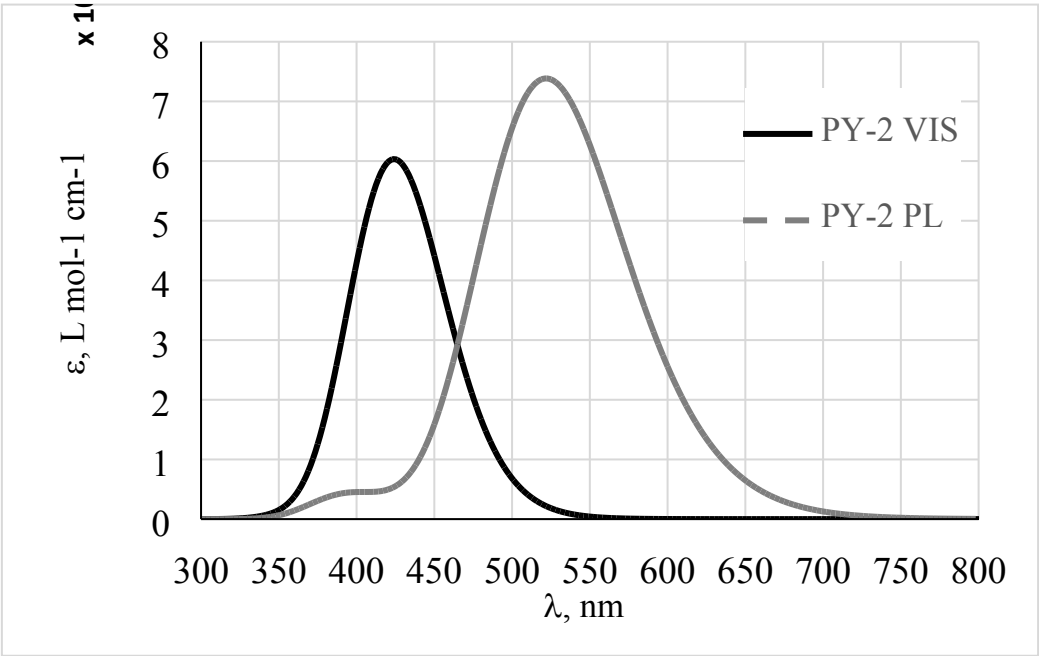

Fig. S11 Visible absorption (VIS) and photoluminescence (PL) spectra of **PY-II** in chloroform computed with DFT.

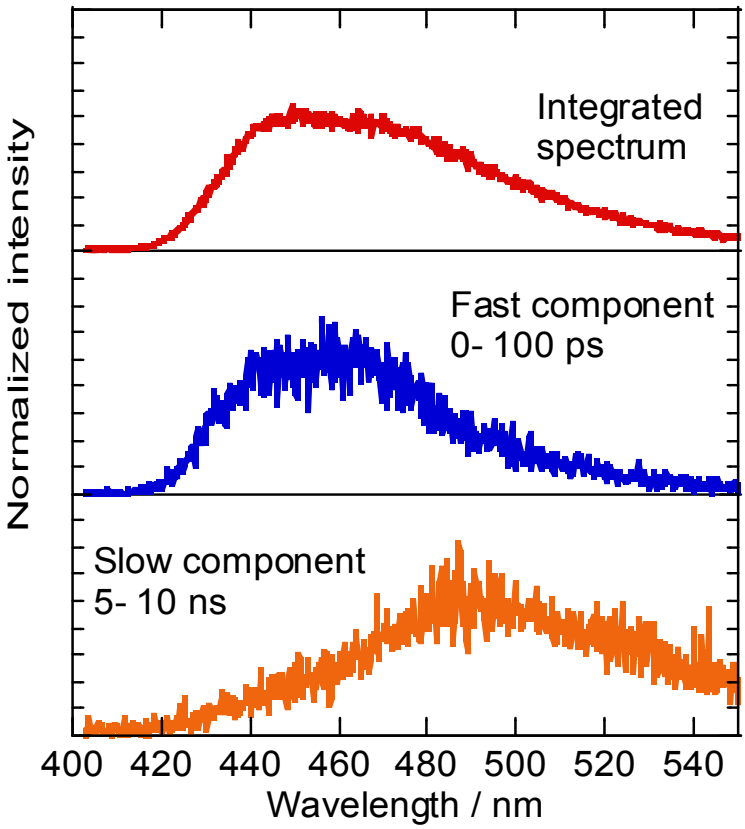

Fig. S12 Photoluminescence (PL) decay spectra of **PY-II**.

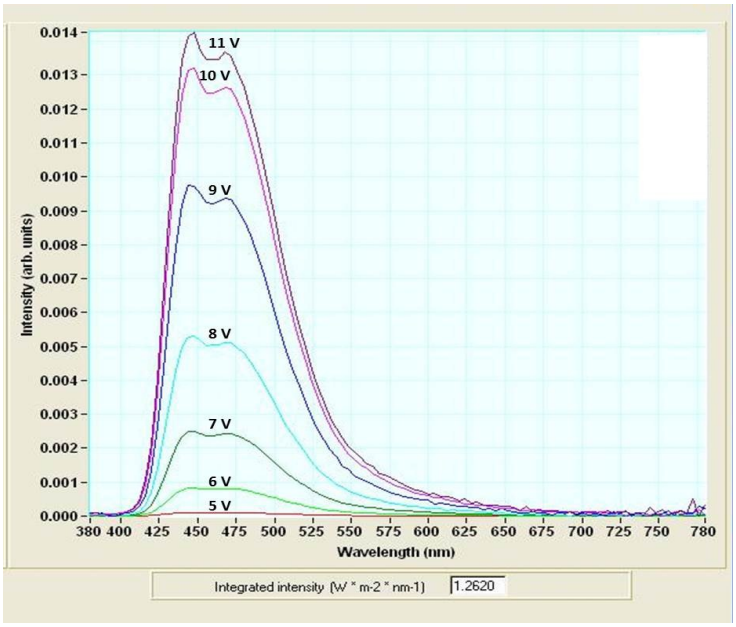

Fig. S13 Electroluminescent (EL) peak variation with respect to different applied bias using **PY-II** based OLED devices.