

Fig. S1. ^{19}F NMR spectrum of the crude mixture obtained during the synthesis of **1a** run at room temperature by reaction of F_4PN with 2-(2-thienyl)ethanol. Each compound is identified by a color and the integration of the signal are given.

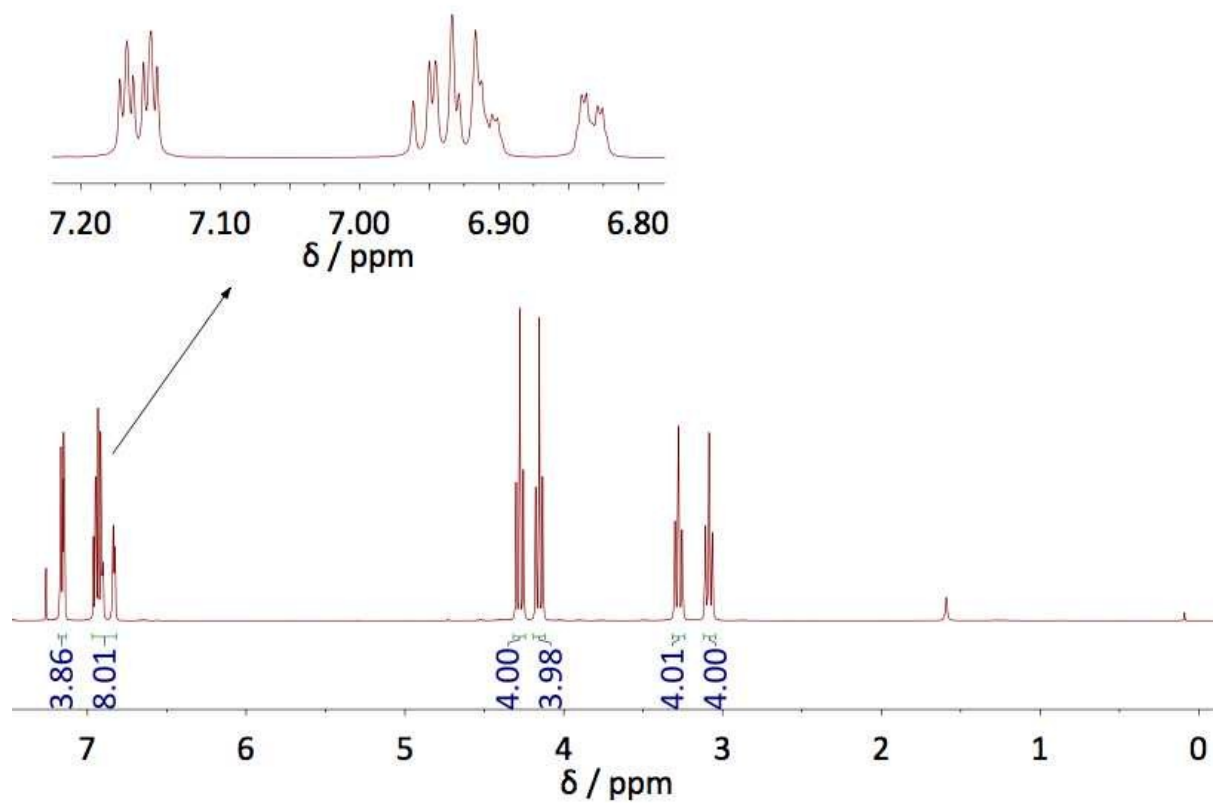


Fig. S2. ^1H NMR spectrum of 4 in CDCl_3

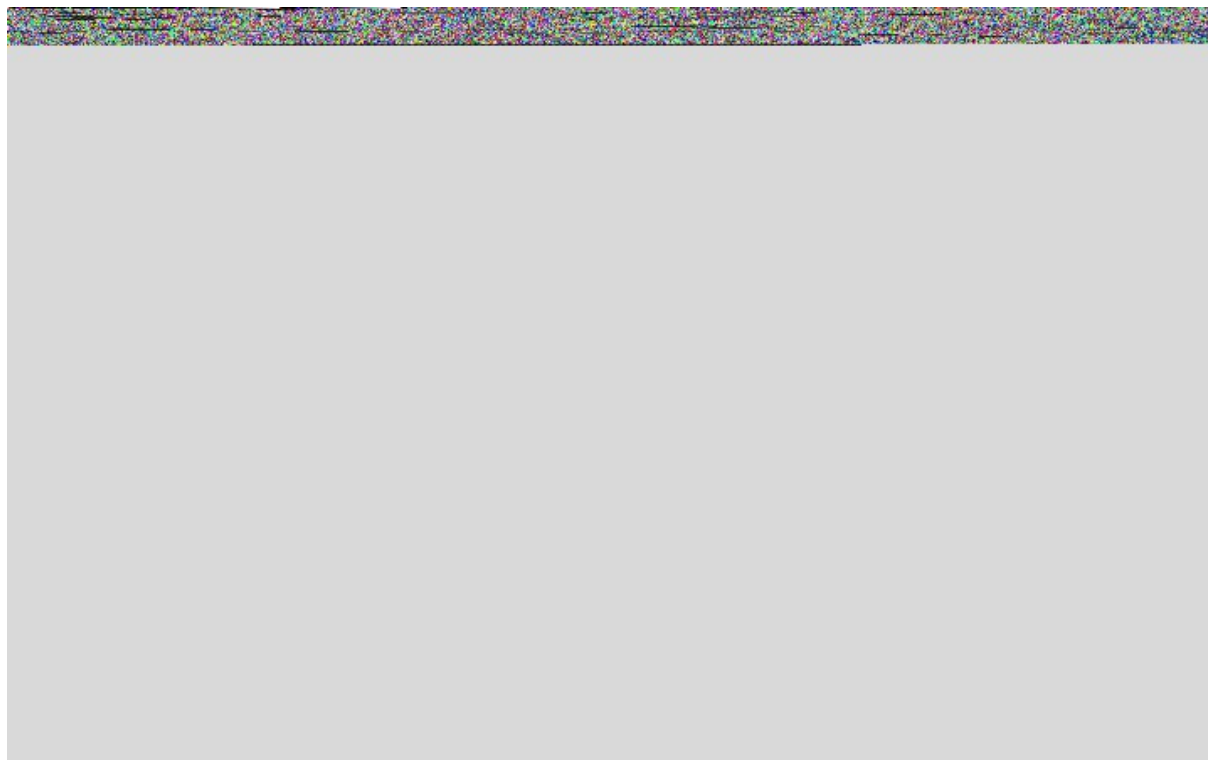


Fig. S3 High-resolution Electrospray (ES+) spectrum of compound **5** (bottom) and the corresponding calculated isotopic pattern (top).

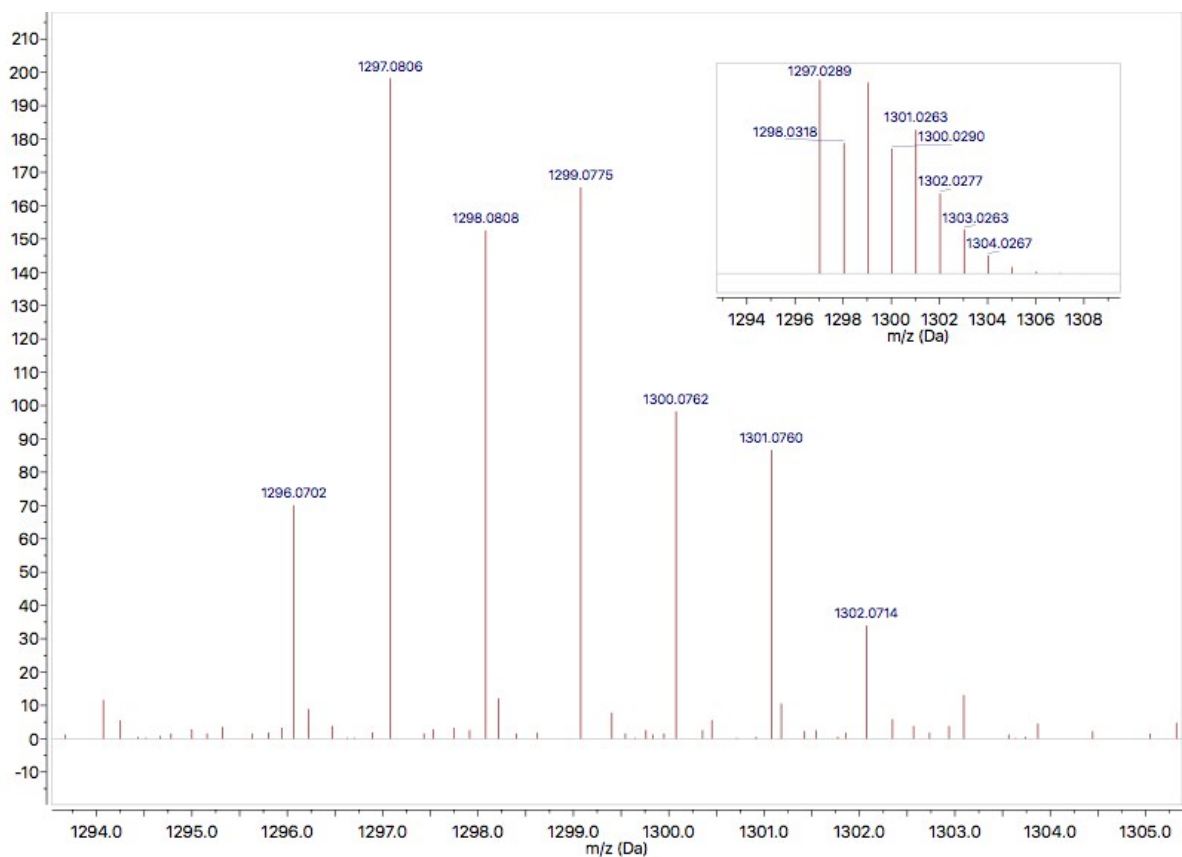


Fig. S4. High-resolution MALDI-ToF spectrum of compound **6** (bottom) and the corresponding calculated isotopic pattern (top).

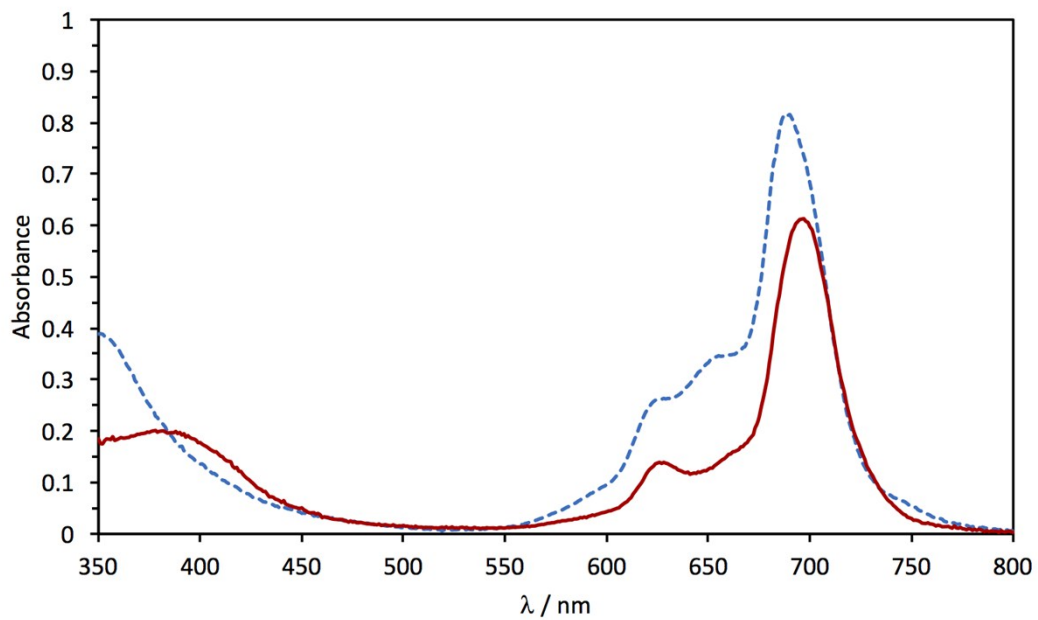


Fig. S5. UV-visible absorption spectra of **6** in chloronaphthalene (solid line) and in CH₂Cl₂ (dotted line).

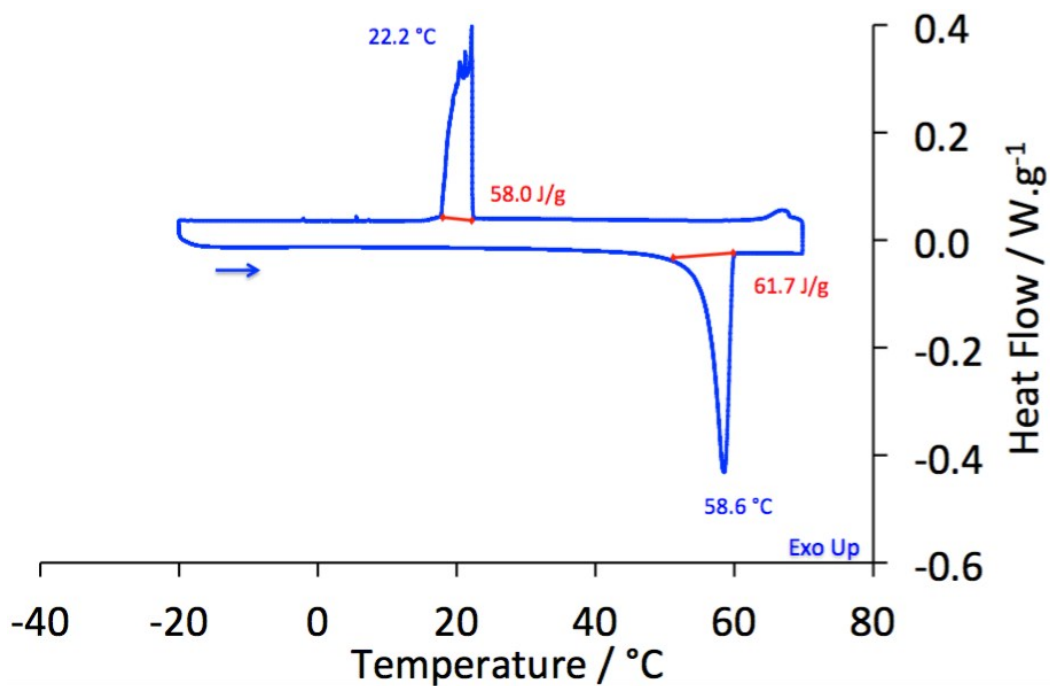


Fig. S6. DSC thermogram of **1a** registered at a heating rate of 1 °C.min⁻¹

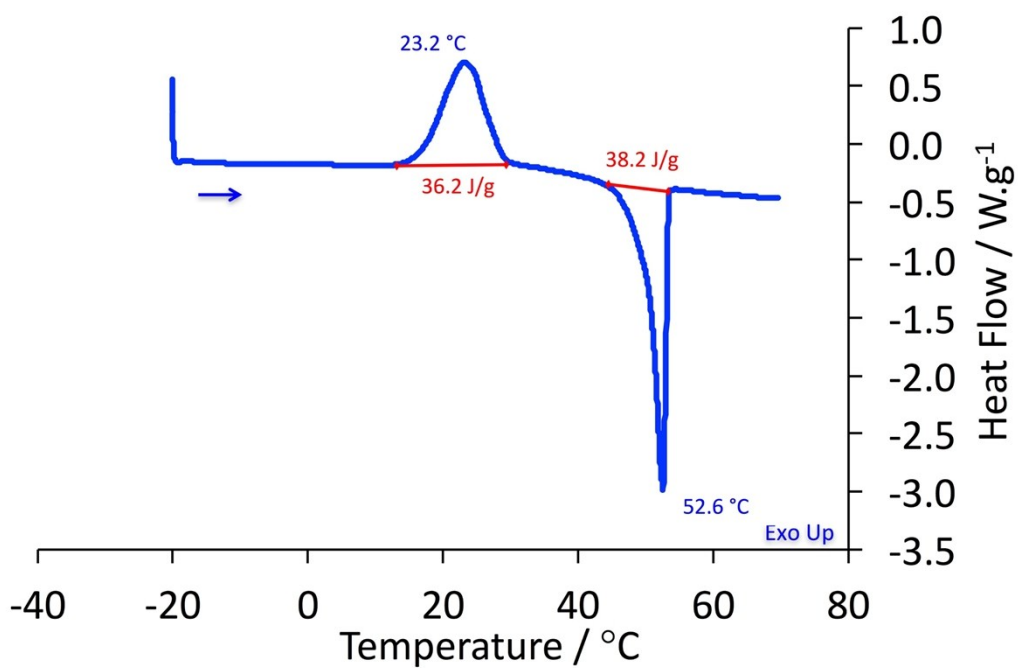


Fig. S7. DSC thermogram of **4** registered at a heating rate of 1 °C.min⁻¹

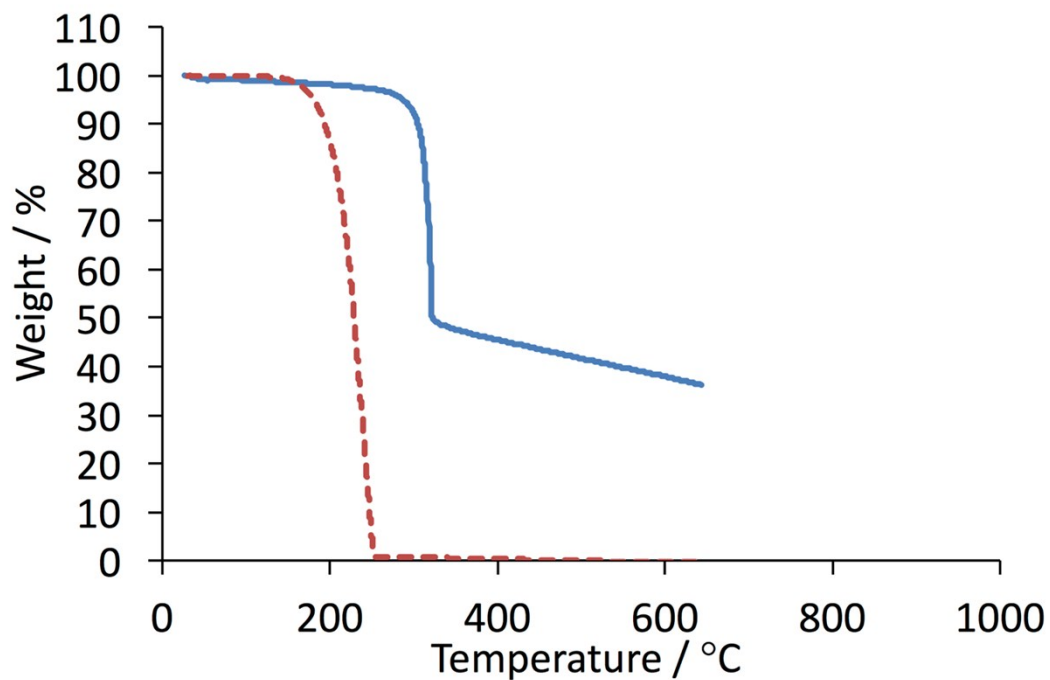


Fig. S8. TGA of 1a (dotted red line) and 4 (solid blue line) at a heating rate of 5 °C.min⁻¹

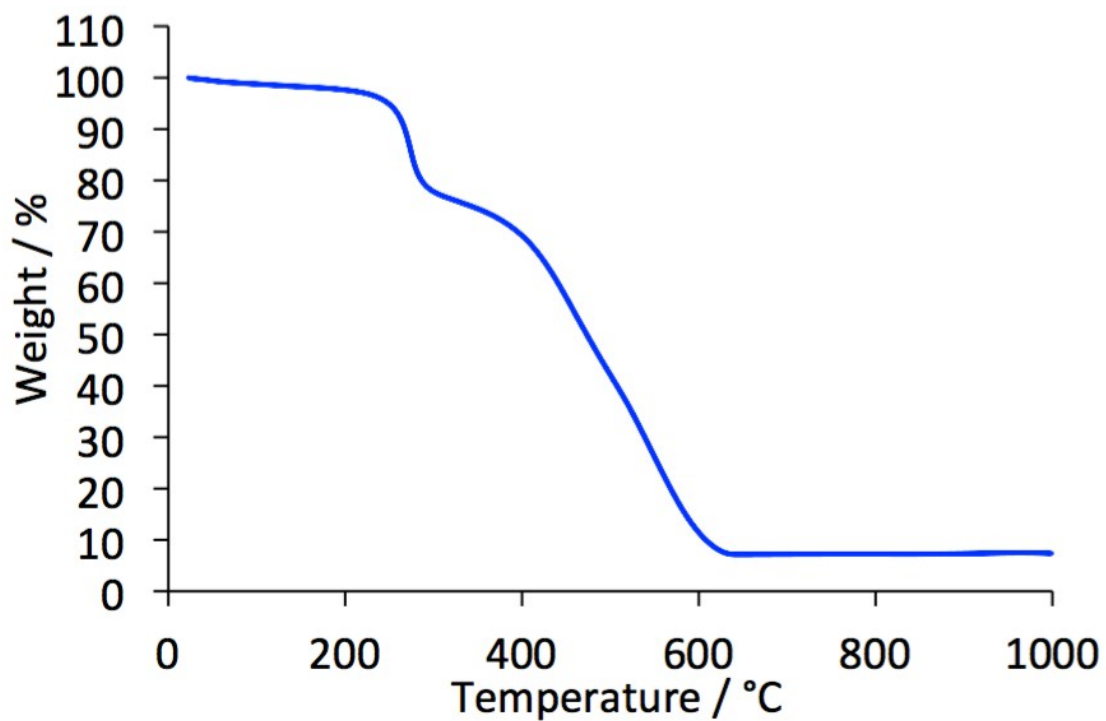


Fig. S9. TGA of 5 at a heating rate of 2 °C.min⁻¹

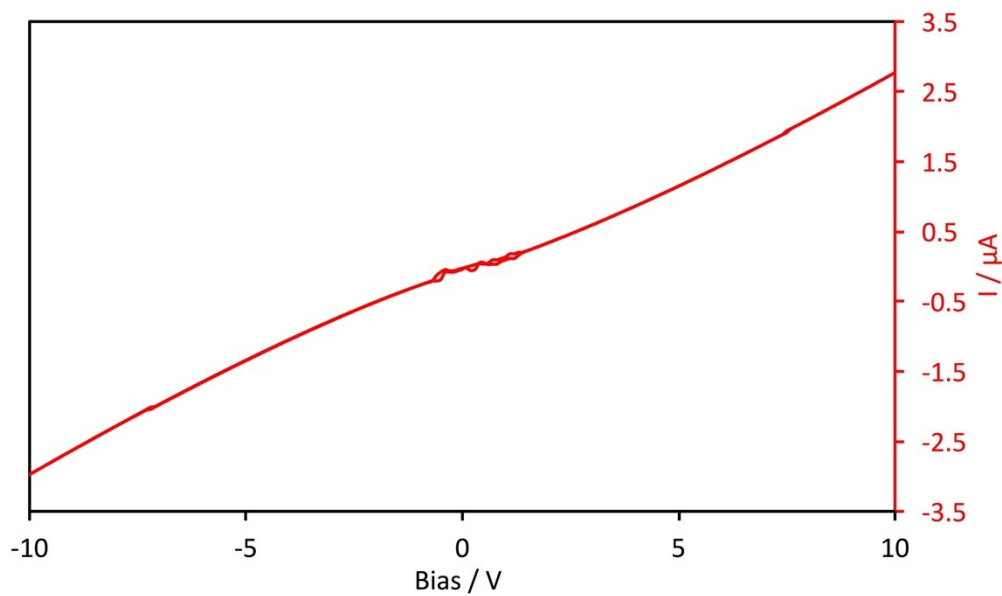


Fig. S10. I(V) characteristics of **5**/LuPc₂ MSDI heterojunction

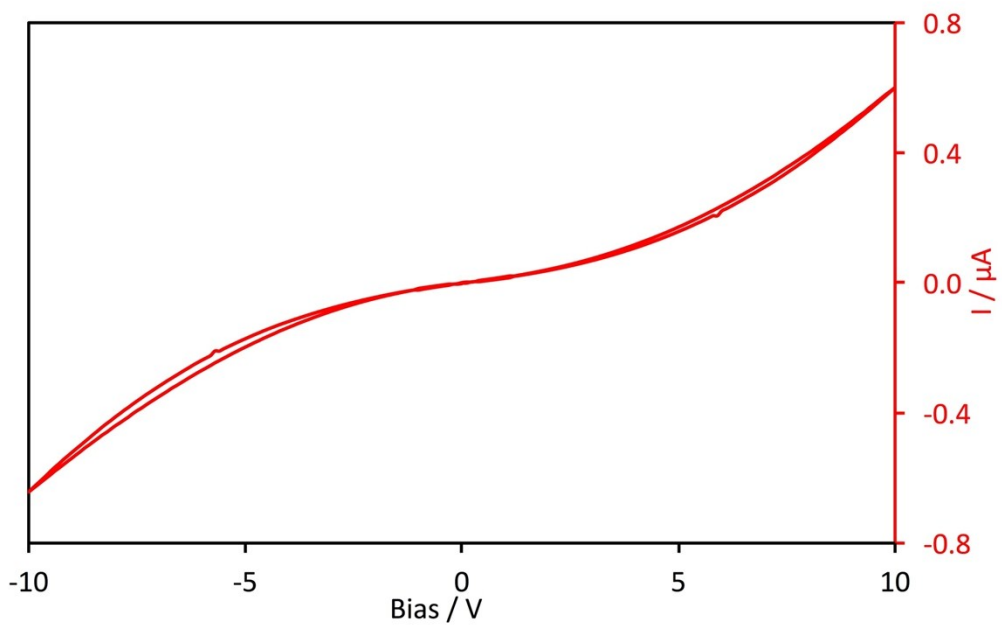


Fig. S11. I(V) characteristics of **6**/LuPc₂ MSDI heterojunction

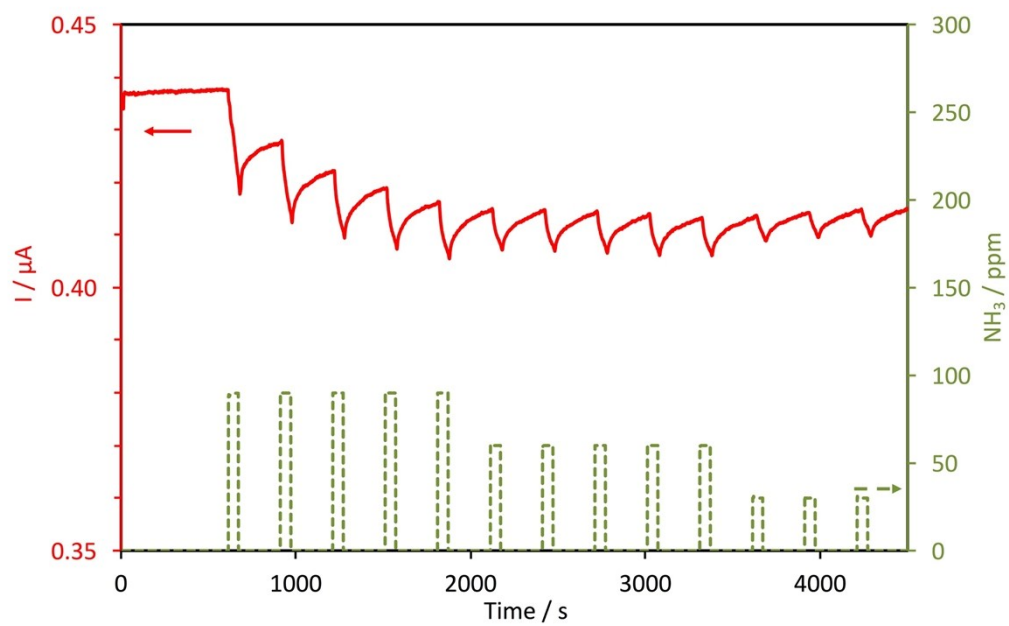


Fig. S12. Response of a **6**/LuPc₂ MSDI heterojunction to ammonia (NH₃, 90, 60 and 30 ppm), in dry air, during exposure/recovery cycles (1 min/4 min).