Supporting Information

Sterically encumbered bipyridyl-derivatized conjugated polymers and conducting metallopolymers incorporating phenylenevinylene, phenyleneethynylene and fluorenylene segments

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Figure S27. Absorption titration (A) and photoluminescence titration (B) spectra for PPE1 (initial concentration of $2.2 \times 10^{-5}$ M for A and $2.2 \times 10^{-6}$ M for B) to Hg(O$_2$CCF$_3$)$_2$ in THF.
Figure S28. Absorption titration (A) and photoluminescence titration (B) spectra for PPE1 (initial concentration of $2.2 \times 10^{-5}$ M for A and $2.2 \times 10^{-6}$ M for B) to Co(NO$_3$)$_2$ in THF.
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Figure S33. Absorption titration (A) and photoluminescence titration (B) spectra for PPE3 (initial concentration of $1.2 \times 10^{-6}$ M for A and B) to Hg(O$_2$CCF$_3$)$_2$ in THF.
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**Figure S36.** ORTEP drawing from the single crystal X-ray diffraction structure of 2-(4-bromo-2,6-dimesitylphenyl)-1,3-dioxolane (50% probability ellipsoids). Hydrogen atoms are omitted for clarity.
Table S1. Refinement details for 2-(4-bromo-2,6-dimesitylphenyl)-1,3-dioxolane.

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<td>(wR2)</td>
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Figure S37. ORTEP drawing from the single crystal X-ray diffraction structure of [PdCl$_2$(BrTABBr)] (30% probability ellipsoids). Hydrogen atoms are omitted for clarity.
Empirical formula: C₆₂H₅₈Br₂Cl₂N₂Pd

Formula weight (g/mol): 1168.22

Temperature (K): 153 (2)

Wavelength (Å): 0.71073

Crystal system: Monoclinic

Space group: C2/c

Unit cell dimensions:

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<tbody>
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<td>γ (deg)</td>
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Volume (Å³): 12699 (4)

Z: 8

Calculated density (Mg/m³): 1.222

Absorption coefficient (mm⁻¹): 1.670

F(000): 4752

Crystal size (mm): 0.43 × 0.24 × 0.06

Crystal color and shape: yellow chip

Θ range for data collection (deg): 2.76 – 25.10

Limiting indices:

-57 < h < 52
0 < k < 10
0 < l < 38

Reflections collected: 23355

Independent reflections: 11132

Completeness to Θ: 25.10 (98.3 %)

Max. transmission: 0.9065

Min. transmission: 0.5337

Refinement method: Full-matrix least-squares on F²

Data / restraints / parameters: 11132/0/634

Goodness of fit on F²: 1.062

Final R indices (I > 2σ(I)):

R1: 0.0706
wR2: 0.1937

R indices (all data):

R1: 0.0959
wR2: 0.2138

Table S2. Refinement details for [PdCl₂(Br-TAB-Br)].