

Supporting Materials

Ni(TipPP)-0-CHO Yield, 96%. ¹H NMR (CDCl₃): δ 9.32 (s, 1H), 9.19 (s, 1H), 8.70 (m, 6H), 7.88 (m, 8H), 7.52 (m, 8H), 3.17 (m, 4H), 1.46 (m, 24H). UV-Vis [λ, nm (ε × 10⁴ M⁻¹cm⁻¹)] CHCl₃: 433 (19), 544 (1.0), 587 (0.7). FTIR (KBr, cm⁻¹): ν_{C=O}1663. FAB-MS: calcd MW, 866.35, m/e = 868 (MH⁺). Anal. Found(calcd) for C₅₇H₅₂N₄ONi : C, 78.15 (78.90); H, 6.19 (6.04); N, 6.20 (6.46).

Ni(TipPP)-1-CHO Yield, 62%. ¹H NMR (CDCl₃): δ 9.14 (d, 1H, J = 8.0 Hz), 8.94 (s, 1H), 8.76 (d, 1H, J = 5.0 Hz), 8.70 (m, 5H), 7.87 (m, 6H), 7.80 (d, 2H, J = 8.0 Hz), 7.51 (m, 8H), 6.94 (d, J = 15.5 Hz), 6.74 (dd, 1H, J=15.5, 8.0 Hz), 3.18 (m, 4H), 1.48 (m, 24H). UV-Vis [λ, nm (ε × 10⁴ M⁻¹cm⁻¹)] CHCl₃: 438 (17), 547 (1.6), 588 (1.3). FTIR (KBr, cm⁻¹): ν_{C=O}1684, ν_{C=C-CHO} 1609. FAB-MS: calcd MW, 892.37, m/e = 894 (MH⁺). Anal. Found(calcd) for C₅₉H₅₄N₄ONi : C, 78.84(79.28); H, 6.19(6.09); N, 6.10(6.27).

Ni(TipPP)-2-CHO Yield, 85%. ¹H NMR (CDCl₃): δ 9.49 (d, 1H, J = 8.0 Hz), 8.90 (s, 1H), 8.71 (m, 6H), 7.79 (d, 2H, J=8.1 Hz), 7.51 (m, 8H), 7.01 (dd, 1H, J = 15.0, 11.1 Hz), 6.78 (dd, 1H, J=15.1, 11.1 Hz), 6.46 (d, 1H, J=15.0 Hz), 6.22 (dd, 1H, J=15.1, 8.0 Hz), 3.18 (m, 4H), 1.48 (m, 24H). UV-Vis [λ, nm (ε × 10⁴ M⁻¹cm⁻¹)] CHCl₃: 441 (14), 547 (1.6), 592 (1.5). FTIR (KBr, cm⁻¹): ν_{C=O}1677, ν_{C=C-C-CHO} 1609. FAB-MS: calcd MW, 918.38, m/e = 919 (M⁺). Anal. Found(calcd) for C₆₁H₅₆N₄ONi : C, 79.55(79.65); H, 6.23(6.14); N, 6.09(5.93).

Ni(TipPP)-3-CHO Yield, 80%. ¹H NMR (CDCl₃): δ 9.57 (d, 1H, J = 7.9 Hz), 8.84 (s, 1H), 8.69 (m, 6H), 7.86 (m, 6H), 7.78 (d, 2H, J=8.0 Hz), 7.49 (m, 8H), 7.04 (dd, 1H, J = 15.1, 11.1 Hz), 6.91 (dd, 1H, J=15.0, 10.8 Hz), 6.52 (dd, 1H, J=14.7, 11.1 Hz), 6.36 (dd, 1H, J=14.7, 10.8 Hz), 6.25 (d, 1H, J=15.0 Hz), 6.15 (dd, 1H, J=15.1, 7.9 Hz), 3.20 (m, 4H), 1.48 (m, 24H). UV-Vis [λ, nm (ε × 10⁴ M⁻¹cm⁻¹)] CHCl₃: 441 (13), 547 (1.6), 592 (1.6). FTIR (KBr, cm⁻¹): ν_{C=O}1677, ν_{C=C-C-C-CHO} 1589. FAB-MS: calcd MW, 944.40, m/e = 946 (MH⁺). Anal. Found(calcd) for C₆₃H₅₈N₄ONi : C, 80.13(80.00); H, 5.99(6.18); N, 5.91(5.92).

Ni(TipPP)-1-DEM Yield, 20%. ¹H NMR (CDCl₃): δ 8.87 (s, 1H), 8.71 (m, 6H), 7.88 (bd, 6H, J=7.8 Hz), 7.77 (d, 2H, J = 8.0 Hz), 7.51 (bd, 8H, J=7.5 Hz), 7.21 (dd, 1H, J=14.9, 11.8 Hz), 7.03 (d, 1H, J=11.8), 6.45 (d, 1H, J = 14.9 Hz), 4.35 (q, 2H, J=7.1Hz), 4.26 (q, 2H, J=7.1Hz), 3.19 (m, 4H), 1.47 (m, 24H), 1.35 (t, 3H, J=7.1Hz), 1.32 (t, 3H, J=7.1Hz). UV-Vis [λ, nm (ε × 10⁴ M⁻¹cm⁻¹)] CHCl₃: 443 (13), 547 (1.3), 588 (1.3). FTIR (KBr, cm⁻¹): ν_{CO₂Et}1718, ν_{C=C-C(CO₂Et)₂} 1602. FAB-MS: calcd MW, 1034.43, m/e = 1035 (M⁺). Anal. Found(calcd) for C₆₆H₆₄N₄O₄Ni : C, 76.65(76.52); H, 6.51(6.23); N, 5.02(5.41).

Ni(TipPP)-1-ECA Yield, 45%. $^1\text{H NMR}$ (CD_2Cl_2): δ 9.06 (s, 1H), 8.73 (m, 6H), 7.91 (m, 6H), 7.81 (d, 2H, $J = 8.1$ Hz), 7.53 (m, 8H), 7.45 (d, 1H, $J = 11.8$ Hz), 7.26 (dd, 1H, $J = 14.8, 11.8$ Hz), 6.73 (d, 1H, $J = 14.8$ Hz), 4.32 (q, 2H, $J = 7.1$ Hz), 3.20 (m, 4H), 1.50 (m, 24H), 1.37 (t, 3H, $J = 7.1$ Hz), 1.32 (t, 3H, $J = 7.1$ Hz). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1} \text{ cm}^{-1}$)] CHCl_3 : 397 (5.7), 432 (sh), 463 (11), 547 (1.4), 609 (2.5). FTIR (KBr, cm^{-1}): $\nu_{\text{C}=\text{N}}$ 2200, $\nu_{\text{CO}_2\text{Et}}$ 1718, $\nu_{\text{C}=\text{C}=\text{C}(\text{CO}_2\text{Et})}$ 1589. FAB-MS: calcd MW, 987.40, $m/e = 988$ (M^+). Anal. Found(calcd) for $\text{C}_{64}\text{H}_{59}\text{N}_5\text{O}_2\text{Ni}$: C, 77.73(77.92); H, 6.13(6.01); N, 6.75(7.08).

Ni(TipPP)-1-MN Yield, 85%. $^1\text{H NMR}$ (CDCl_3): δ 9.01 (s, 1H), 8.03 (m, 6H), 7.87 (m, 6H), 7.78 (d, 2H, $J = 7.9$ Hz), 7.53 (m, 8H), 7.20 (dd, 1H, $J = 14.7, 11.6$ Hz), 6.96 (d, 1H, $J = 11.6$ Hz), 6.67 (d, 1H, $J = 14.7$ Hz), 3.20 (m, 4H), 1.49 (m, 24H). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1} \text{ cm}^{-1}$)] CHCl_3 : 400 (7.6), 442 (sh), 473 (9.2), 536 (1.4), 623 (2.8). FTIR (KBr, cm^{-1}): $\nu_{\text{C}=\text{N}}$ 2200, $\nu_{\text{C}=\text{C}=\text{C}(\text{CN})_2}$ 1589. FAB-MS: calcd MW, 940.38, $m/e = 942$ (MH^+). Anal. Found(calcd) for $\text{C}_{62}\text{H}_{54}\text{N}_6\text{Ni}$: C, 79.28(79.07); H, 5.96(5.78); N, 8.43(8.92).

Ni(TipPP)-1-TBA Yield, 80%. $^1\text{H NMR}$ (CDCl_3): δ 9.15 (s, 1H), 8.67 (m, 6H), 8.52 (dd, 1H, $J = 14.9, 12.2$ Hz), 7.87 (m, 6H), 7.79 (d, 2H, $J = 8.1$ Hz), 7.67 (d, 1H, $J = 12.2$ Hz), 7.50 (m, 8H), 6.96 (d, 1H, $J = 14.9$ Hz), 4.53 (m, 4H), 3.16 (m, 4H), 1.43 (m, 24H), 1.32 (t, 3H, $J = 7.0$ Hz), 1.29 (t, 3H, $J = 7.0$ Hz). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1} \text{ cm}^{-1}$)] CHCl_3 : 409 (11), 456 (4.0), 501 (7.1), 647 (3.6). FTIR (KBr, cm^{-1}): $\nu_{\text{N}=\text{C}=\text{O}}$ 1697, 1760, $\nu_{\text{C}=\text{C}=\text{C}(\text{TBA})}$ 1562, 1541. FAB-MS: calcd MW, 1074.42, $m/e = 1075$ (M^+). Anal. Found(calcd) for $\text{C}_{67}\text{H}_{64}\text{N}_6\text{O}_2\text{Sni}$: C, 74.82(74.79); H, 5.90(6.00); N, 7.45(7.81).

Ni(TipPP)-0-MN Yield, 84%. $^1\text{H NMR}$ (CDCl_3): δ 9.48 (s, 1H), 8.77 (d, 1H, $J = 5.0$ Hz), 8.73 (d, 1H, $J = 5.0$ Hz), 8.68 (m, 4H), 7.92 (d, 2H, $J = 8.0$ Hz), 7.87 (d, 4H, $J = 8.0$ Hz), 7.79 (d, 2H, $J = 8.0$ Hz), 7.59 (d, 2H, $J = 8.0$ Hz), 7.55 (d, 2H, $J = 8.0$ Hz), 7.52 (d, 2H, $J = 8.0$ Hz), 7.25 (s, 1H), 3.19 (m, 4H), 1.48 (m, 24H). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1} \text{ cm}^{-1}$)] CHCl_3 : 391 (5.5), 458 (12), 555 (1.0), 611 (2.0). FTIR (KBr, cm^{-1}): $\nu_{\text{C}=\text{N}}$ 2200. FAB-MS: calcd MW, 914.36, $m/e = 914$ (M^+). Anal. Found(calcd) for $\text{C}_{60}\text{H}_{52}\text{N}_6\text{Ni}$: C, 78.78 (78.69); H, 5.82 (5.72); N, 8.97 (9.18).

Ni(TipPP)-2-MN Yield, 89%. $^1\text{H NMR}$ (CDCl_3): δ 8.92 (s, 1H), 8.70 (m, 6H), 7.85 (m, 6H), 7.78 (d, 2H, $J = 8.0$ Hz), 7.59 (m, 8H), 7.30 (d, 1H, $J = 11.8$), 7.02 (dd, 1H, $J = 14.9, 11.1$ Hz), 6.77 (dd, 1H, $J = 14.4, 11.8$ Hz), 6.56 (dd, 1H, $J = 14.4, 11.1$ Hz), 6.45 (d, 1H, $J = 14.9$ Hz), 3.19 (m, 4H), 1.48 (m, 24H). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1} \text{ cm}^{-1}$)] CHCl_3 : 408 (9.3) 454 (sh), 488 (7.8), 625 (3.3). FTIR (KBr, cm^{-1}): $\nu_{\text{C}=\text{N}}$ 2200, $\nu_{\text{C}=\text{C}=\text{C}=\text{C}(\text{CN})_2}$ 1582. FAB-MS: calcd MW, 966.39, $m/e = 966$ (M^+). Anal. Found(calcd) for $\text{C}_{64}\text{H}_{56}\text{N}_6\text{Ni}$: C, 79.50(79.42); H, 6.05(5.83); N, 8.29(8.68).

Ni(TipPP)-3-MN Yield, 92%. $^1\text{H NMR}$ (CDCl_3): δ 8.86 (s, 1H), 8.69 (m, 6H), 7.86 (m, 6H), 7.88 (m, 6H), 7.77 (d, 2H, $J = 8.0$ Hz), 7.50 (m, 8H), 7.42 (d, 1H, $J = 11.8$ Hz), 6.96 (dd, 1H, $J = 15.0, 10.8$ Hz), 6.83 (dd, 1H, $J = 14.0, 11.0$ Hz), 6.68 (dd, 1H, $J = 14.0, 11.8$ Hz), 6.48 (dd, 1H, $J = 14.5, 11.0$ Hz), 6.36 (dd, 1H, $J = 14.5, 10.8$ Hz), 6.28 (d, 1H, $J = 15.0$

Hz), 3.19 (m, 4H), 1.48 (m, 24H). UV-Vis [λ , nm ($\epsilon \times 10^{-4} \text{ M}^{-1}\text{cm}^{-1}$)] CHCl_3 : 413 (10), 465 (6.1), 506 (7.7), 619 (4.0). FTIR (KBr, cm^{-1}): $\nu_{\text{C}=\text{N}}$ 2200, $\nu_{\text{C}-\text{C}-\text{C}-\text{C}-\text{C}-\text{C}(\text{CN})_2}$ 1558, 1543. FAB-MS: calcd MW, 992.41, $m/e = 993 (\text{M}^+)$. Anal. Found(calcd) for $\text{C}_{66}\text{H}_{58}\text{N}_6\text{Ni}$: C, 79.91(79.76); H, 5.82(5.88); N, 8.57(8.46).