Supplementary Data

3-Cyano-(2-phenethylamino)-4,6-diphenyl pyridine (**3**). To a magnetically stirred solution of 1,3-diphenylpropane-1,3-dione (0.224 g, 1 mmol) and $ZnCl_2$ (10 mol %) in 10 mL CH_2Cl_2, malononitrile (0.066 g, 1 mmol), phenethyl amine (0.12 mL, 1 mmol) and *N*-hydroxy benzamide (50 mol %, 0.68 g) were added in a one-pot manner. The solution was stirred at room temperature for 10 h. The reaction progress was monitored by IR. When one of the CN absorptions (2228 cm^{-1}) in IR spectrum of the reaction mixture had disappeared, the solvent was removed under reduced pressure and the product was purified using column chromatography (silica gel, ethyl acetate/*n*-hexane: 1/5). The crystals of product were obtained (0.27 g, 72% yield) as yellow crystals. Melting point: 148 °C.

Structural Characterization

IR, ν_{max}: 3353, 2211, 1550 cm^{-1}; δ_H (250 MHz, $CDCl_3$): 3.08 (2H, t, J = 7. 2 Hz, CH_2), 3.96 (2H, q, J = 6.7 Hz, CH_2-N), 7.19 (1H, s, CH of pyridine ring), 7.26–7.42, 7.50–7.59, 7.64–7.68, 8.12–8.15 (15H, 4m, Ph protons) ppm; δ_C ($CDCl_3$): 35.93 (CH_2), 43.25 (CH_2-N), 109.61 (CN), 117.41 (CH of pyridine), 126.60, 127.39, 128.76, 128.78, 128.94, 129.73, 130.17, 137.34, 138.34, 139.17, 155.08, 159.06 (aromatic carbons) ppm; MS: *m/z* = 375 (M^+), 298, 272, 255, 221, 195, 120, 91, 77, 75, 43; Anal. Calcd for $C_{26}H_{21}N_3$: C, 83.17; H, 5.64; N, 11.19; Found: C, 83.20; H, 5.69; N, 11.23.

Figure S1. The ^{1}H-NMR spectrum of 3-cyano-(2-phenethylamino)-4,6-diphenyl pyridine.

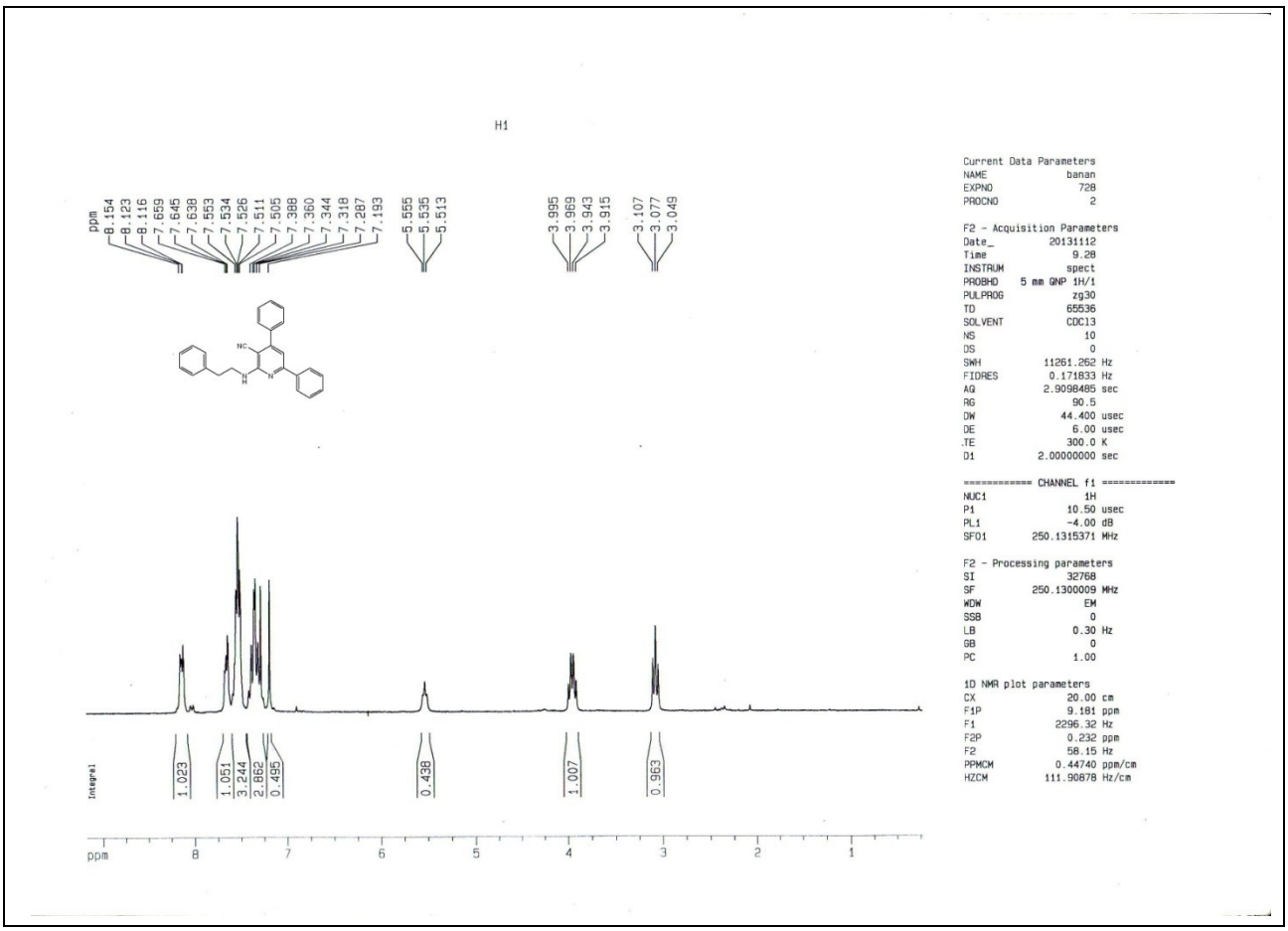

Figure S2. The ^{13}C-NMR spectrum of 3-cyano-(2-phenethylamino)-4,6-diphenyl pyridine.

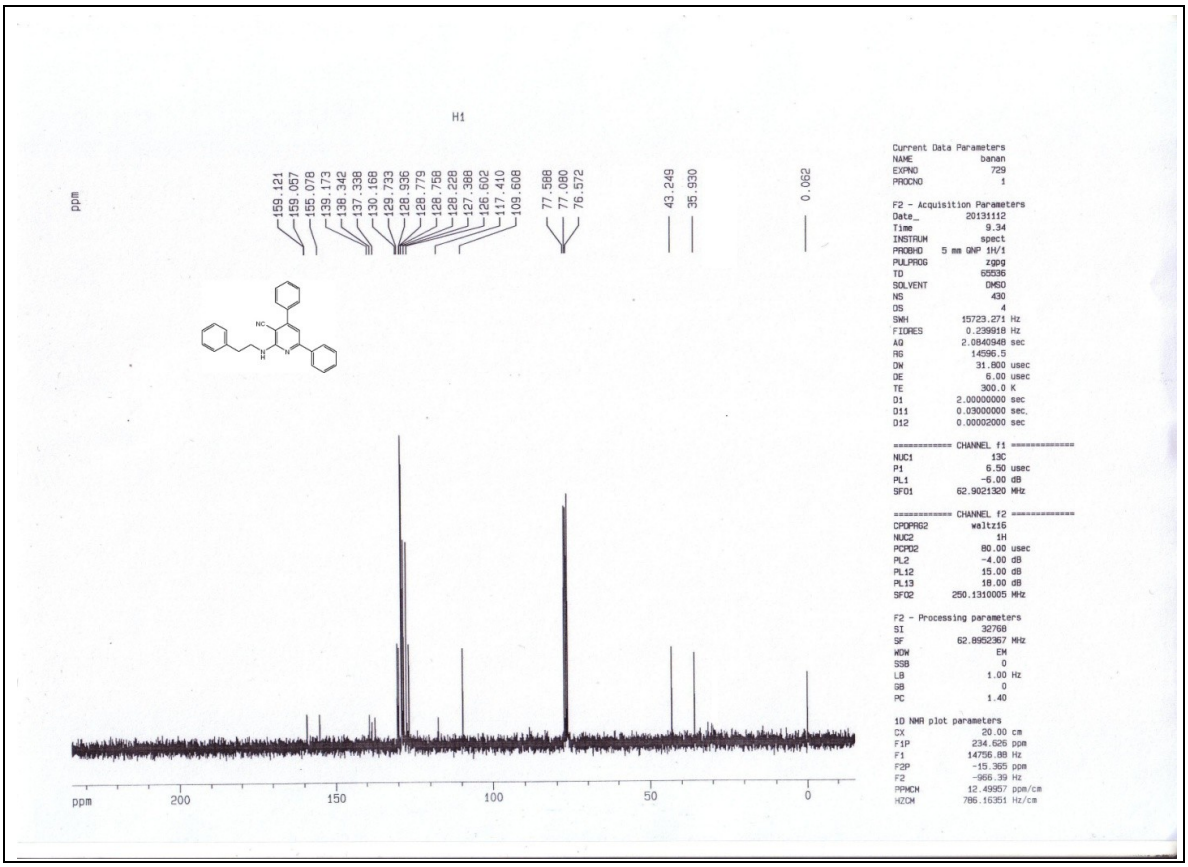

Figure S3. The IR spectrum of 3-cyano-(2-phenethylamino)-4,6-diphenyl pyridine.