



SUPPLEMENTARY MATERIAL TO
**Kinetics and mechanism of the oxidation of dithiocarbamic acids
in the presence of Co(II) phthalocyaninetetacarboxylic acid**

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CHARACTERIZATION DATA FOR THE SYNTHESIZED PHTHALOCYANINES

Cobalt tetrakis[(4-carboxyphenyl)amino]phthalocyanine (CoPc(NH)). Yield: 56.9 %; Anal. Calcd. for C₆₀H₃₆O₈N₁₂Co: C, 64.81; H, 3.26; N, 15.12 %. Found: C, 63.92; H, 3.47; N, 14.73 %; IR (KBr, cm⁻¹): 1705 (COOH), 3420 (NH); UV-Vis (λ_{max} / nm): 259, 292 (B-band), 654 (oscillation satellite), 734 (Q-band, monomer).

Cobalt tetrakis[(4-carboxyphenyl)sulfanyl]phthalocyanine (CoPc(S)). Yield: 85.0 %; Anal. Calcd. for C₆₀H₃₂CoN₈O₈S₄: C, 61.07; H, 2.73; N, 9.49; S, 10.87 %. Found: C, 60.34; H, 3.45; N, 8.97; S, 10.28 %; IR (KBr, cm⁻¹): 1705 (COOH), 1385 (Ar-S-Ar); UV-Vis (λ_{max} / nm): 293 (B-band), 630 (Q-band, aggregate).

Cobalt tetrakis[(4-carboxyphenyl)oxy]phthalocyanine (CoPc(O)). Yield: 85.0 %; Anal. Calcd. for C₆₀H₃₂CoN₈O₁₂: C, 64.34; H, 3.05; N, 9.97; O, 17.28 %. Found: C, 64.58; H, 2.89; N, 10.04; O, 17.21 %; IR (KBr, cm⁻¹): 1705 (COOH), 1275 (Ar-O-Ar); UV-Vis spectra (λ_{max} / nm): 289 (B-band), 625 (Q-band, aggregate).

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