

No.	Compound name	Reaction equation	pH	Rate constant (L mol <sup>-1</sup> s <sup>-1</sup> )	Comments	Reference
68	Tris(2,2'-bipyridine)cobalt(II) ion	$\text{e}_{\text{aq}}^- + \text{Co}(\text{bpy})_3^{2+} \longrightarrow \text{Co}(\text{bpy})_3^+$		$7.1 \times 10^{10}$	p.r.; D.k. at 650 nm in soln. contg. $5 \times 10^{-5}$ mol L <sup>-1</sup> Co <sup>2+</sup> , 0.15 mol L <sup>-1</sup> EtOH and 0.005 mol L <sup>-1</sup> phosphate buffer and varied [bpy].	85A034