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trans-/ *cis*-[CoCl₂(en)₂]Cl; Tetraammine-carbonatocobalt(III) nitrate, [Co(NH₃)₄(CO₃)]NO₃, *i.e.* [Co(CO₃)(NH₃)₄]NO₃; *Tris*(acetylaceto-nato)cobalt(III), [Co(acac)₃]; *Tris*(ethylenediamine)cobalt(III) chloride, [Co(en)₃]Cl₃; *Tris*(acetylacetonato)chromium(III), [Cr(acac)₃], *i.e.* [Cr(C₅H₇O₂)₃]; Potassium *tris*(oxalato)chromate(III) trihydrate, K₃[Cr(C₂O₄)₃]·3H₂O; Potassium *cis*-[(diaquabis(oxalato)chromate(III))] dihydrate K[*cis*-Cr(ox)₂(OH₂)₂]·2H₂O and Potassium *trans*-[(diaquabis(oxalato)chromate(III))] trihydrate, K[*trans*-Cr(ox)₂(OH₂)₂]·3H₂O; Reinecke's salt, NH₄[Cr(NH₃)₂(NCS)₄]·H₂O; Potassium hexathiocyanato(κ-N)chromate(III), K₃[Cr(NCS)₆]·4H₂O; Potassium *tris*(oxalato)ferrate(III), K₃[Fe(C₂O₄)₃]·3H₂O; *Tris*(acetylacetonato)iron(III), [Fe(acac)₃]; Hexaamminenickel(II) chloride [Ni(NH₃)₆]Cl₂; *Tris*(ethylenediamine)nickel(II) chloride dihydrate, [Ni(en)₃]Cl₂·2H₂O; *Tris*(ethylenediamine)nickel(II) thiosulfate, [Ni(en)₃]S₂O₃; *Trans*-diaquabis(glycinato-κ²NO)nickel(II), *trans*-[Ni(gly)₂(OH₂)₂]; Tetraamminecopper(II) sulfate monohydrate, [Cu(NH₃)₄]SO₄·H₂O (more correctly, [Cu(NH₃)₄(OH₂)]SO₄, *i.e.* aquatetraamminecopper(II) sulfate; *Bis*(acetylacetonato)copper(II), [Cu(acac)₂]; *cis*-*bis*(glycinato-κ²N,O)copper(II) monohydrate, *cis*-[Cu(gly)₂]·H₂O and *trans*-*cis*(glycinato-κ²N, O)copper(II) Monohydrate, *trans*-[Cu(gly)₂]·H₂O; Illustration of Thermodynamic and Kinetic Control of Crystallisation; Controlled Synthesis of Two Copper(II) Oxalate Hydrates, K₂[Cu(C₂O₄)₂]·2H₂O (Dihydrate) and K₂[Cu(C₂O₄)₂]·4H₂O (Tetrahydrate); Kinetic vs. Thermodynamic Control of Crystallisation (*cf.* Crystallisation of *cis*-[Cu(gly)₂]·H₂O and *trans*-[Cu(gly)₂]·H₂O; *Bis*(biguanide)copper(II) chloride, [Cu(bigH)₂]Cl₂·2H₂O; *Bis*(acetylacetonato)oxidovanadium(IV), [V(acac)₂O]; Potassium *tris*(oxalato)aluminate(III) trihydrate, K₃[Al(C₂O₄)₃]·3H₂O; Synthesis of Ni(II) Complexes through Ligand Exchange Reaction Starting from [Ni(OH₂)₆]²⁺: One-Pot Synthesis

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