

Supplementary information

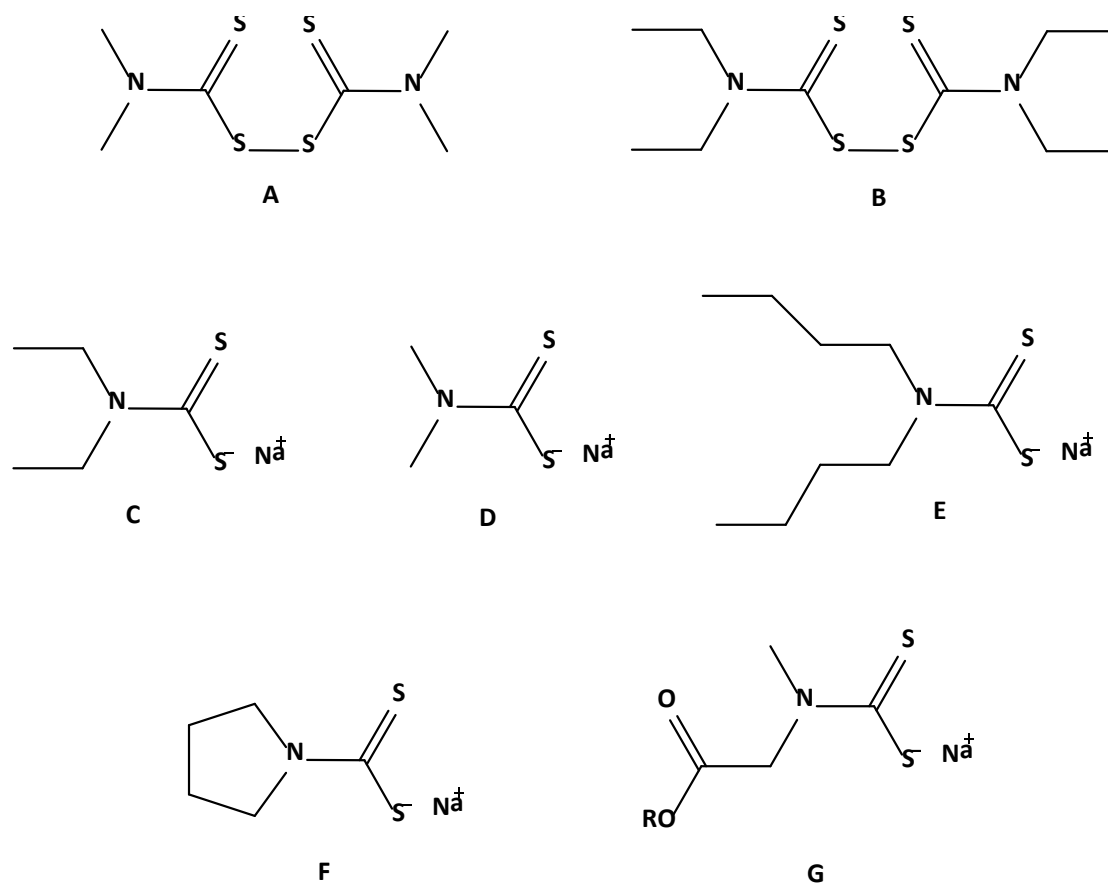


Figure SI-1. Structures of some disulfides and dithiocarbamates. Tetramethyldisulfide (TMDTS) **A**, Tetraethylthiuramdisulfide **B**, diethylthiocarbamate sodium salt (NaDET) **C**, dimethylthiocarbamate sodium salt (NaDMDT) **D**, butylthiocarbamate sodium salt **E**, pyrrolidinedithiocarbamate sodium salt (NaPDT) **F**, sarsosine ester dithiocarbamate (RSDT, R= Me, Et, *t*Bu) **G**.

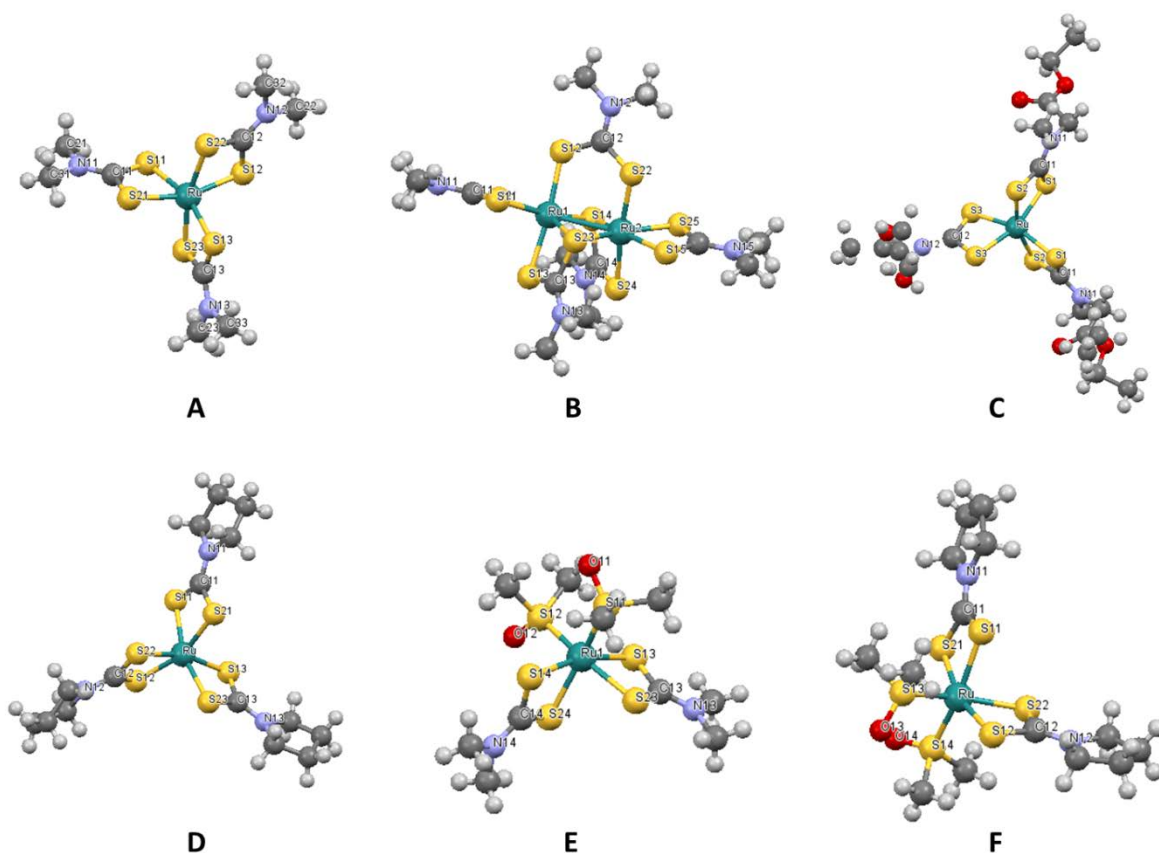


Figure SI-2. A .Crystal structure of the mononuclear [Ru(DMDT)₃] complex (Cambridge Crystallographic Data Centre number: 824317) [75]. **B. Crystal structure of the dinuclear derivative [Ru₂(DMDT)₅]BF₄** (Cambridge Crystallographic Data Centre number: 882747) [57]. **C. Crystal structure of the mononuclear [Ru(ESDT)₃] complex** (Cambridge Crystallographic Data Centre number: 824319) [75]. **D. Crystal structure of the mononuclear [Ru(PDT)₃] complex** (Cambridge Crystallographic Data Centre number: 824318) [75]. **E. Crystal structure of the Ru(II) heteroleptic [Ru(DMDT)₂(DMSO)₂] complex** (Cambridge Crystallographic Data Centre number: 882745) [57]. **F: Crystal structure of the Ru(II) heteroleptic [Ru(PDT)₂(DMSO)₂] complex** (Cambridge Crystallographic Data Centre number: 882745) [57].

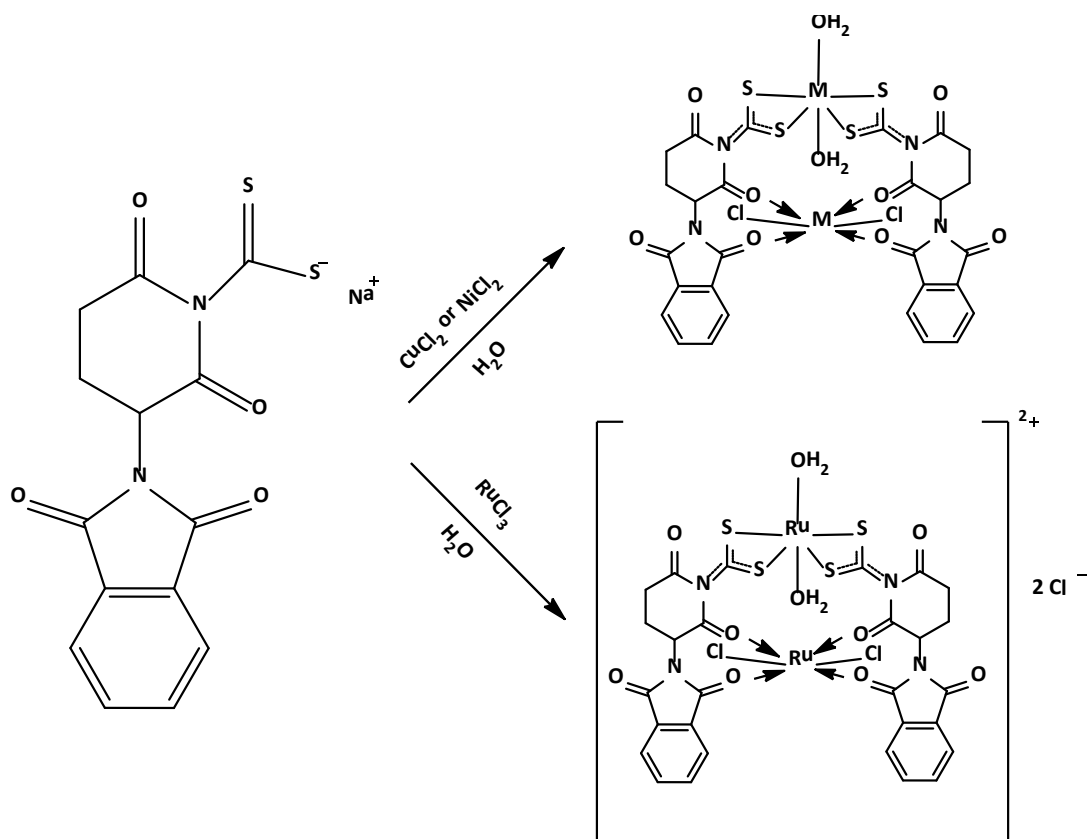


Figure SI-3. Synthetic strategy for the preparation of thalidomide-dithiocarbamate derivatives of Cu(II), Ni(II) and Ru(III).