



Cobalt-tris-2,2'-pyridylquinoline complex, 6.5 mg in d_3 -acetonitrile

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Field strength: 600 MHz

Why is this your favorite spectrum?

Scientific merit: The paramagnetic Co(II) metal centre in this complex leads to an extraordinary chemical shift dispersion of proton resonances and significantly enhances T1/T2 relaxation. This enabled the acquisition of a gCOSY-experiment (pulse sequence cosygpqf, $aq=0.008s$, $d1=0.05$ sec, $ns=4$, $sw(f1,f2)$ 200 ppm, number of complex data points (f1,f2) 1024, FID resolution (f1,f2) 117 Hz, 10 min). The unexpectedly intense and extensive cross peak pattern unequivocally connects all protons in the three spectroscopically distinct ligands.