Substitution-controlled ultrafast excited-state processes in Ru-dppz-derivatives

Supporting Info (SI)

**Figure S1.** Proton NMR spectra (400 MHz, 300K, 128 scans) of the complex \([\text{tbbpy}]_2\text{Ru}([\text{dppz}-2,7-\text{Br}_2])\)(PF$_6$)$_2$ in CD$_3$CN at three different concentrations: 4.9 mmol/l, 9.8 mmol/l and 19.5 mmol/l. The different proton signals of the dppz-2,7-Br$_2$ ligand in the aromatic region are marked with numbers. All other signals belong to the tbbpy-ligand (for detailed assignment see the experimental section).

The position and the shape of the proton NMR signals corresponding to the dppz ligand dependent on the concentration (Figure S1). While the signals of the phenazine part of the dppz-ligand are nearly unaffected by concentration, especially the signal of the phenanthroline part in the 3,6-position is influenced. A fourfold higher concentration of the complex (19.5 mm instead of 4.9 mM) causes a clear shift of the concerning proton signal (H3+6) of 0.19 ppm.