

Electronic Supplementary Information

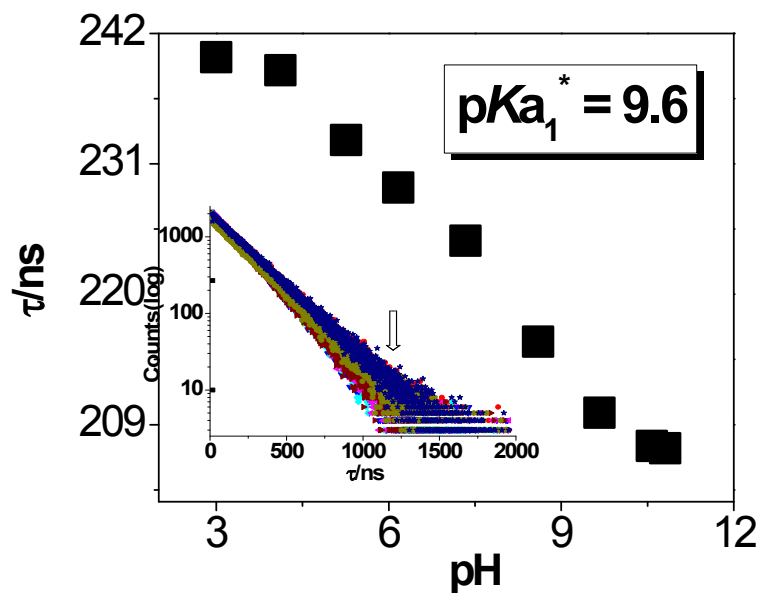


Fig. S1 Change of the excited state lifetimes of **1** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **1** as a function of pH of the solution. Excited state pK^* values are also given in figure.

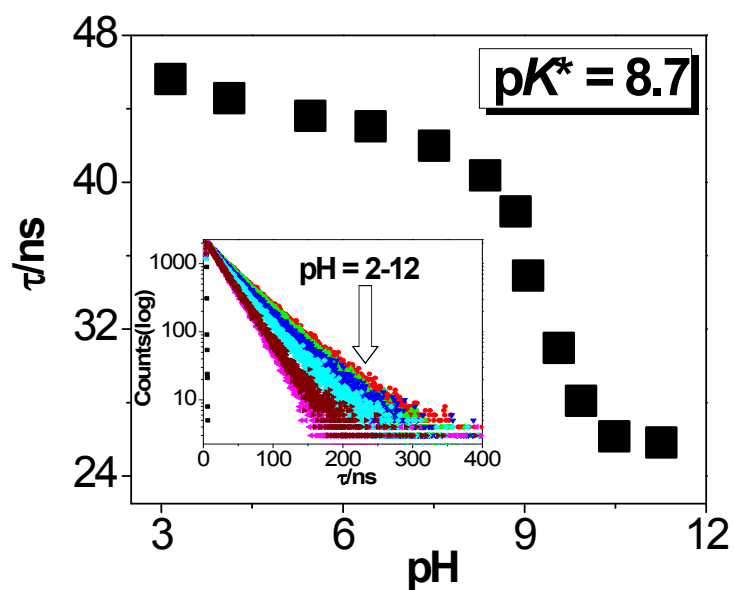


Fig. S2 Change of the excited state lifetimes of **2** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **2** as a function of pH of the solution. Excited state pK^* values are also given in figure.

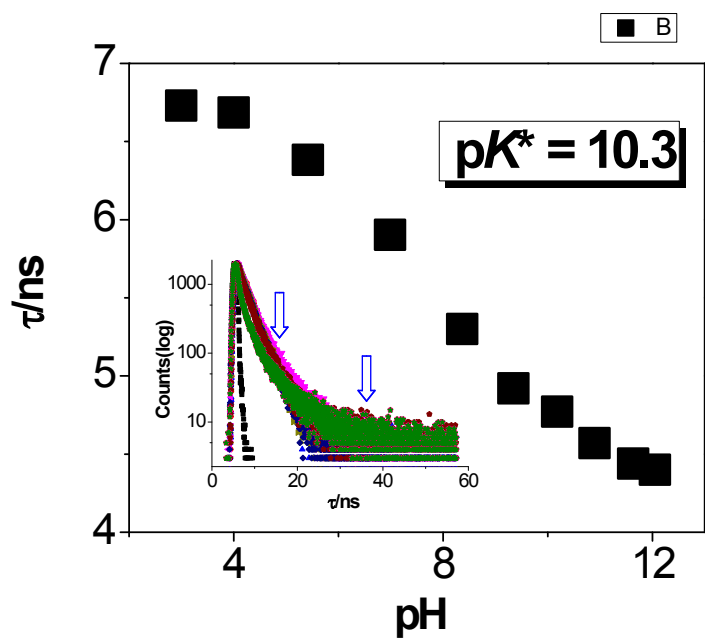


Fig. S3 Change of the excited state lifetimes of **3** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **3** as a function of pH of the solution. Excited state pK^* values are also given in figure.

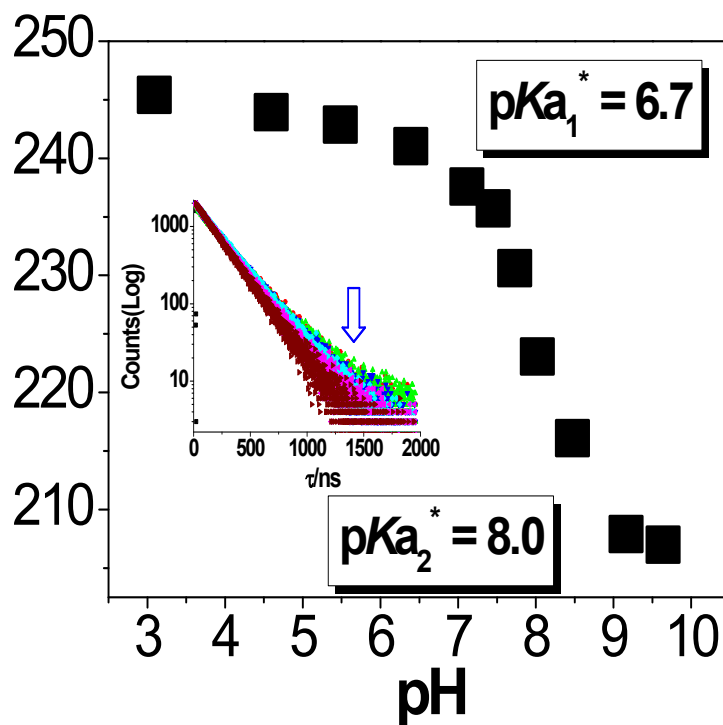


Fig. S4 Change of the excited state lifetimes of **RuFeRu (4)** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **3** as a function of pH of the solution. Excited state pK^* values are also given in figure.

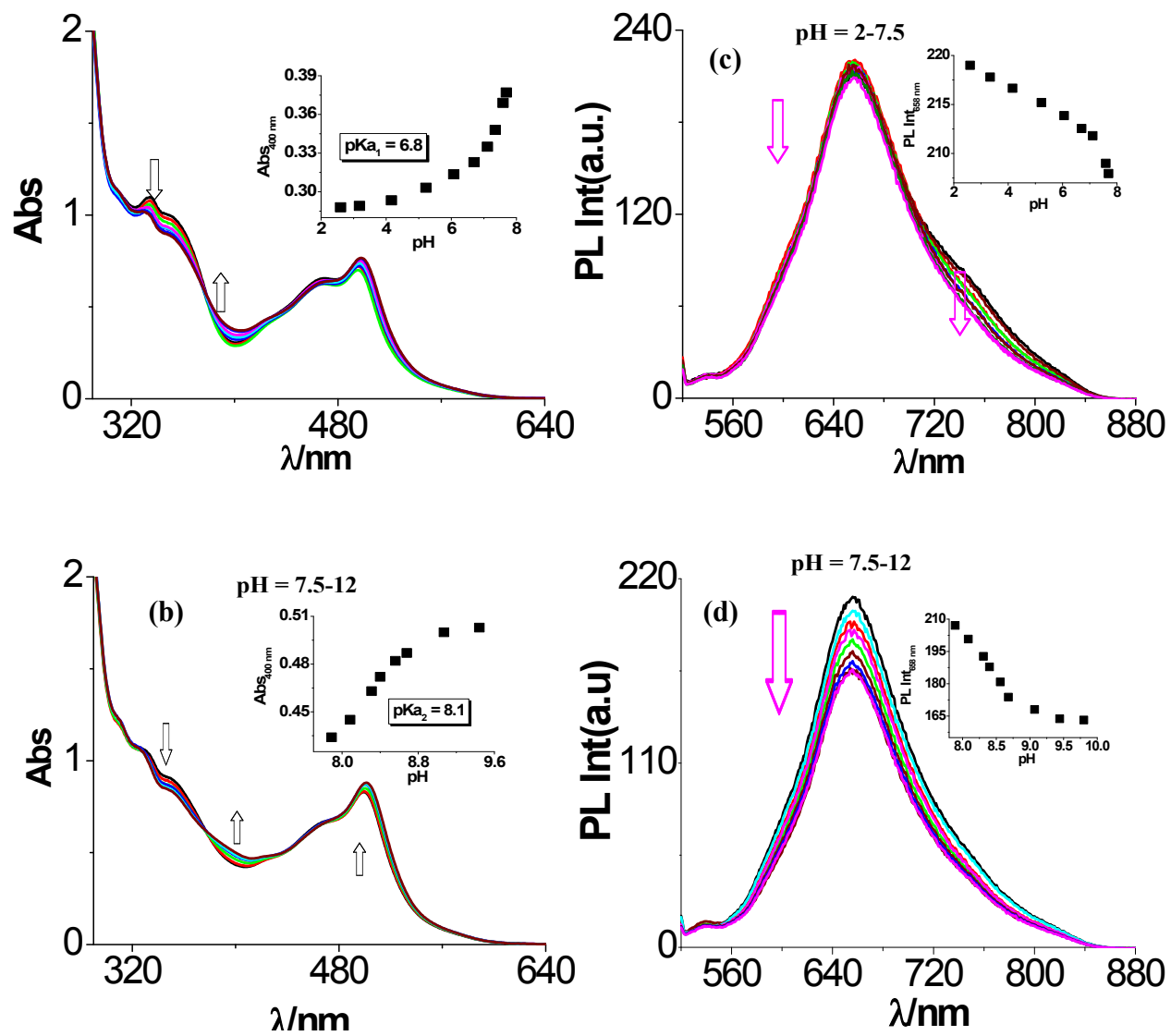


Fig. S5 Changes in the absorption (a-b) and photoluminescence spectra (c-d) of **RuRuRu (5)** with variation of pH in acetonitrile-water (3:2 v/v). The insets show the change of absorbance (a- b) and luminescence intensity (c-d) with the pH of the solution.

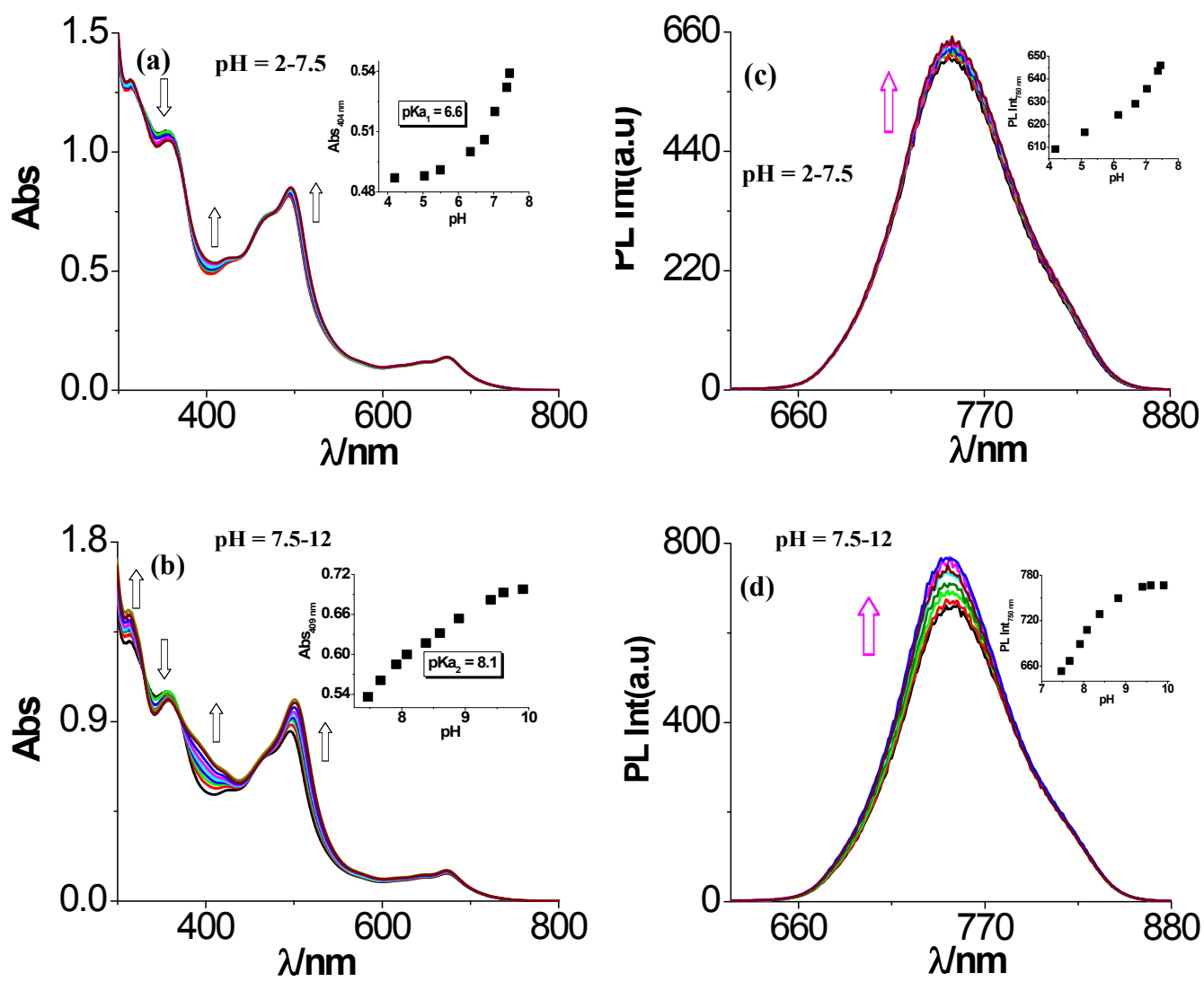


Fig. S6 Changes in the absorption (a-b) and photoluminescence spectra (c-d) of **RuOsRu (6)** with variation of pH in acetonitrile-water (3:2 v/v). The insets show the change of absorbance (a-b) and luminescence intensity (c-d) with the pH of the solution.

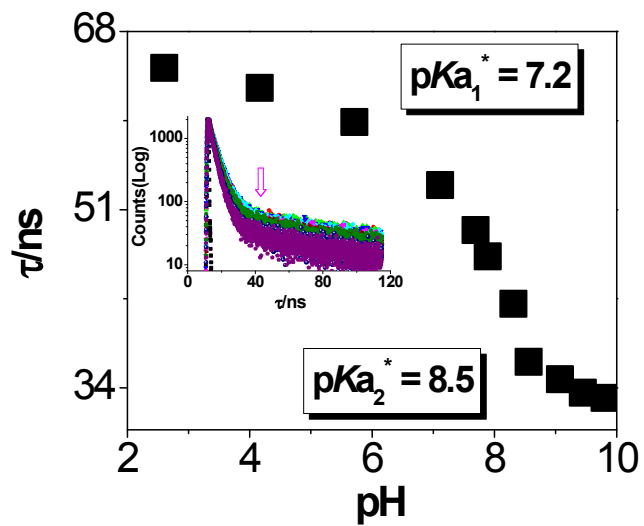


Fig. S7 Change of the excited state lifetimes of **RuRuRu (5)** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **5** as a function of pH of the solution. Excited state pK^* values are also given in figure.

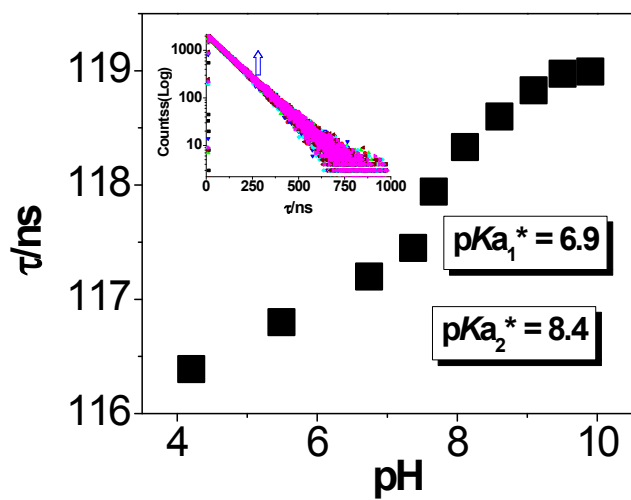


Fig. S8 Change of the excited state lifetimes of **RuOsRu (6)** with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **5** as a function of pH of the solution. Excited state pK^* values are also given in figure.

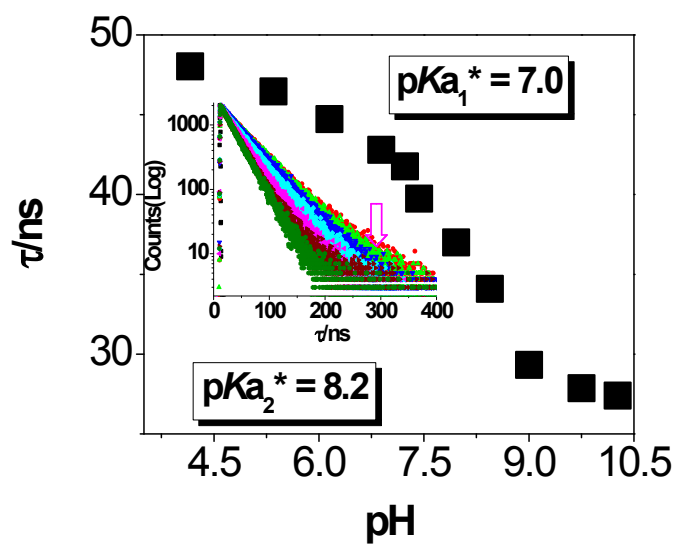


Fig. S9 Change of the excited state lifetimes of OsRuOs (**8**) with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **8** as a function of pH of the solution. Excited state pK^* values are also given in figure.

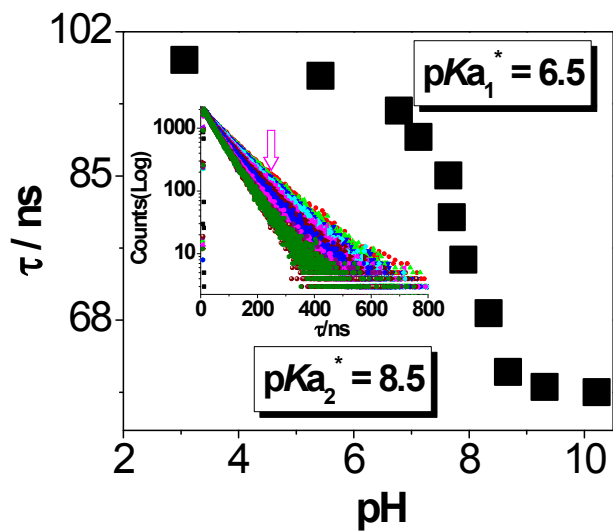


Fig. S10 Change of the excited state lifetimes of **OsOsOs** (**9**) with variation of pH in acetonitrile-water (3:2 v/v). Inset shows the decay profiles of **9** as a function of pH of the solution. Excited state pK^* values are also given in figure.

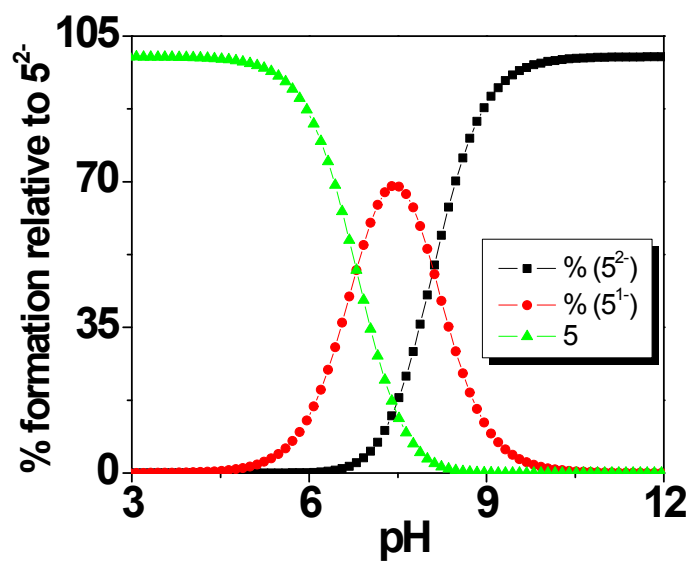


Fig. S11 The distribution of the three species for the complex **5** in the pH range of 2-12.

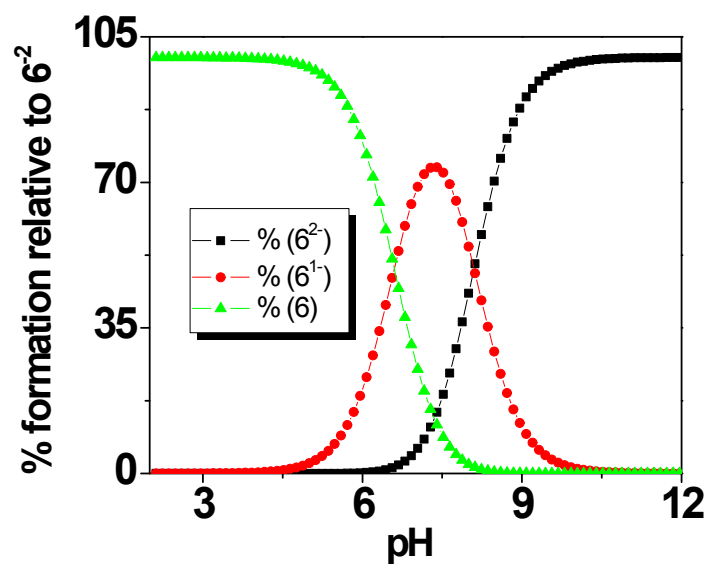


Fig. S12 The distribution of the three species for the complex **6** in the pH range of 2-12.

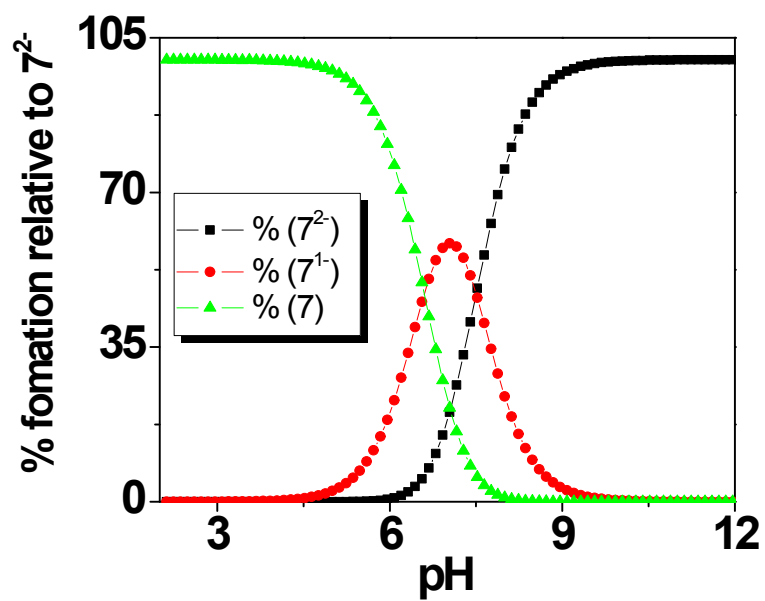


Fig. S13 The distribution of the three species for the complex **7** in the pH range of 2-12.

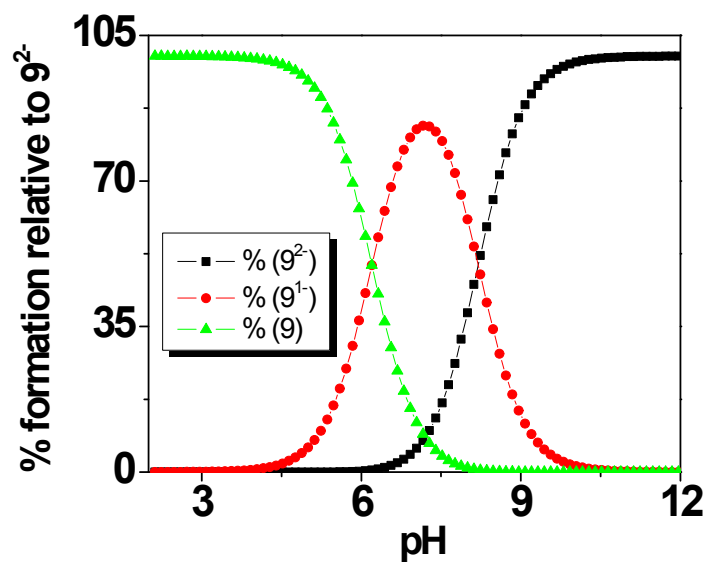


Fig. S14 The distribution of the three species for the complex **9** in the pH range of 2-12.