

Electronic Supplementary Information for Dalton Transactions
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Luminescence and structural properties of lanthanide complexes of Schiff bases derived from pyridoxal and amino acids

Lada Puntus,^{*a} Konstantin Zhuravlev,^a Konstantin Lyssenko,^b Mikhail Antipin^b and
Irina Pekareva^a

Electronic Supplementary Information

(5 pages)

Table S 1. Observed crystal-field sub-levels (cm^{-1}) in 1:1 and 1:2 Eu^{III} complexes with PL-Asp and PL-His respectively, as determined from high resolution luminescence spectra at 77 K. The ${}^7\text{F}_0$ level is taken as the origin.

Level	1:1	1:2
${}^7\text{F}_1$	197	288
	224	402
	255	414
	387	
	517	
${}^7\text{F}_2$	927	920
	1044	942
	1174	932
		1067
${}^7\text{F}_3$	1849	1844
	1905	1891
	1924	1912
	1952	1979
	1996	
	2057	
${}^7\text{F}_4$	2667	2767
	2707	2917
	2831	2932
	2889	2967
	2937	3057
	2965	
	3016	
	3091	
	3038	
3109		

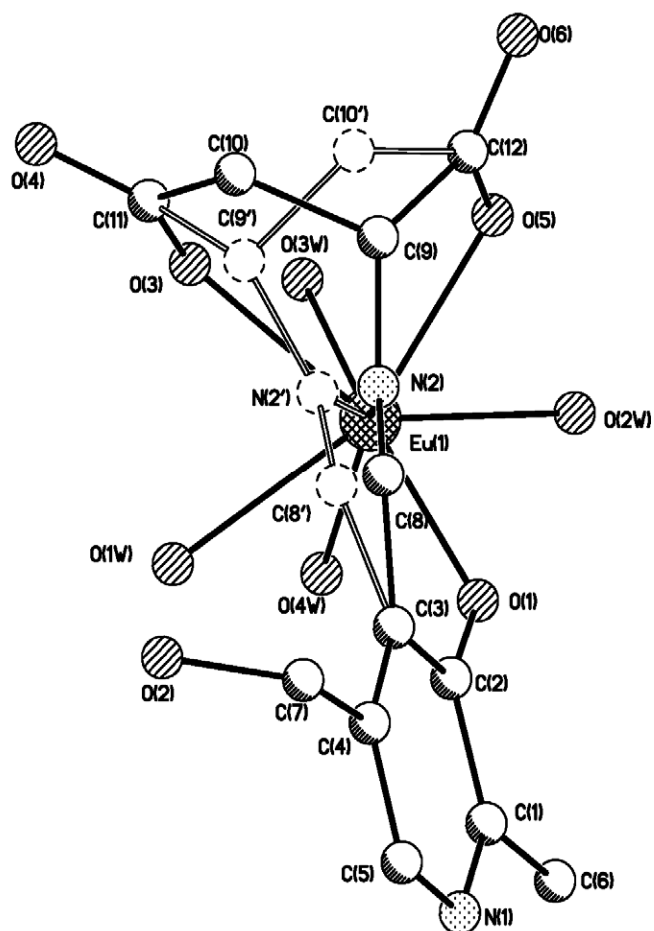


Figure S 1. The superposition of two enantiomers in crystal of complex **1**. The minor part (s.o.f. 0.198(6)) is shown by dashed lines. The hydrogen atoms are omitted for clarity.

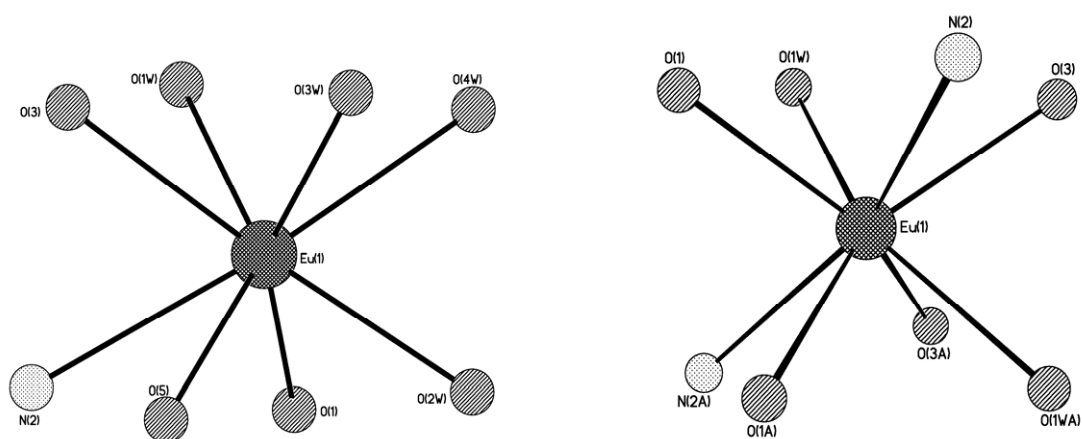


Figure S 2. The polyhedron of Eu^{III} in the crystals of **1** (left) and **2** (right) complexes.

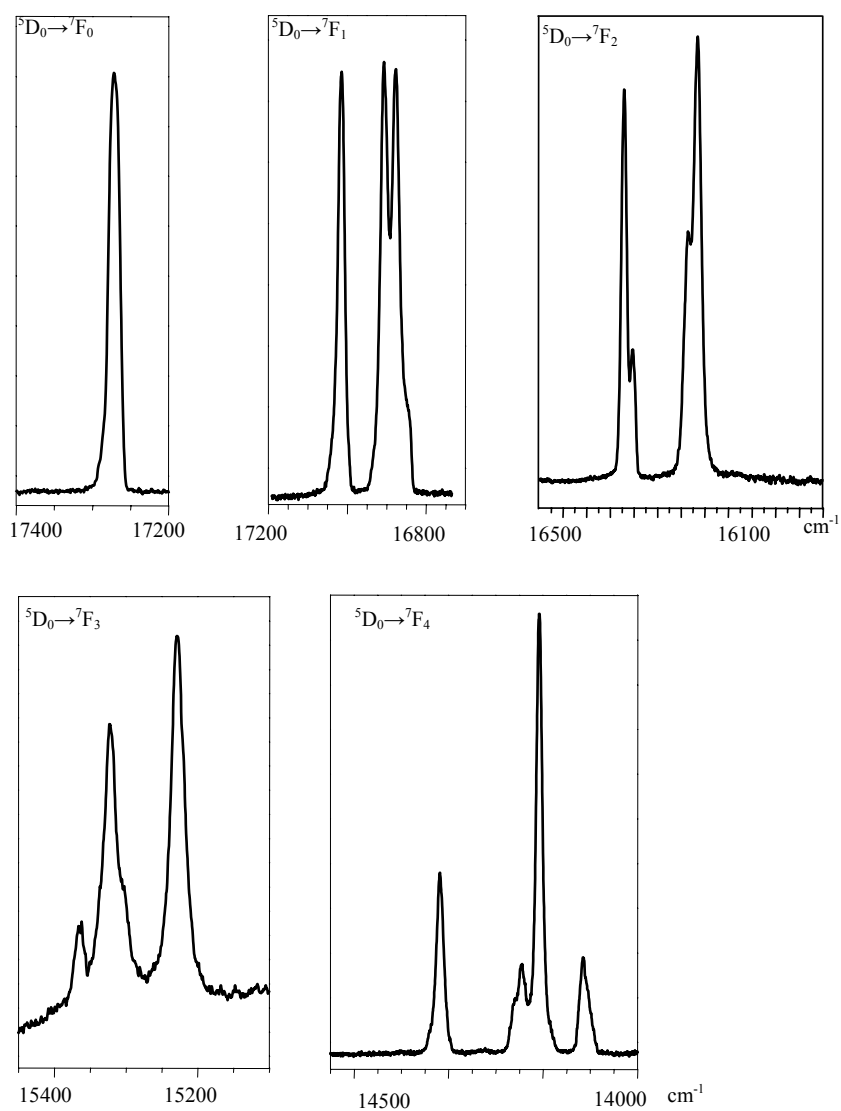


Figure S 3. Parts of high resolution luminescence spectrum of $[\text{Eu}(\text{PL-His})_2(\text{H}_2\text{O})_2]\text{Cl}(\text{H}_2\text{O})_4$ (**2**) at 77K in the region of europium electronic transitions

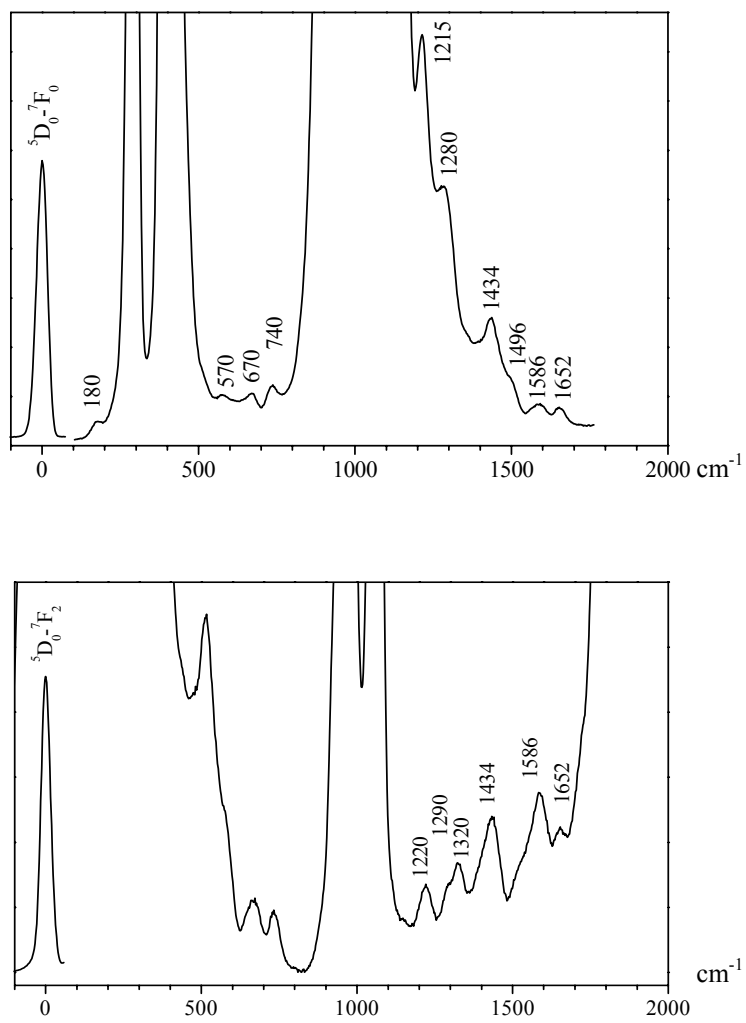


Figure S 4. Part of luminescence spectra of [Eu(PL-His)₂(H₂O)₂]Cl(H₂O)₄ (**2**) in the region of vibronic satellites of $^5D_0 \rightarrow ^7F_0$ (top) and $^5D_0 \rightarrow ^7F_2$ (bottom) transitions at 77 K