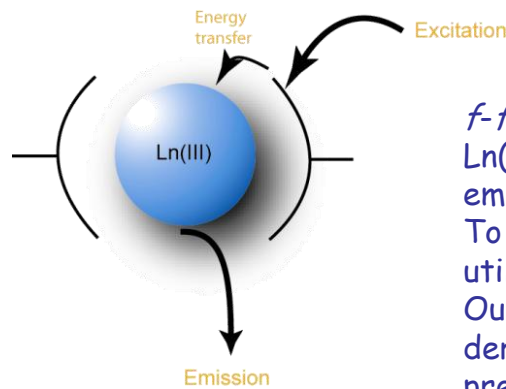


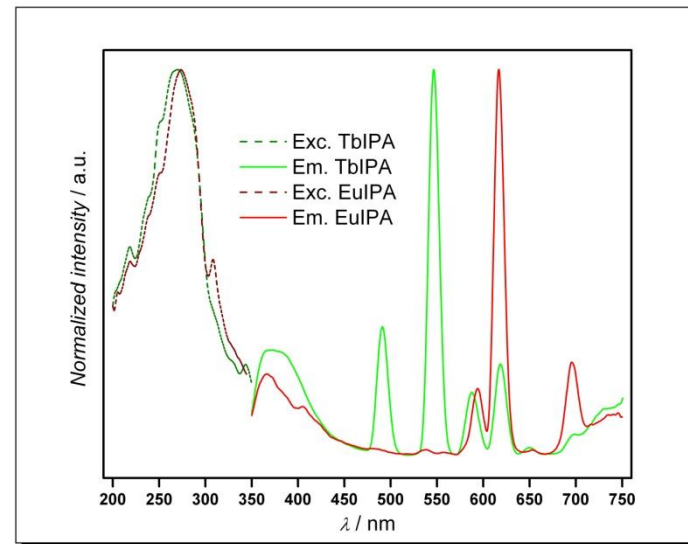
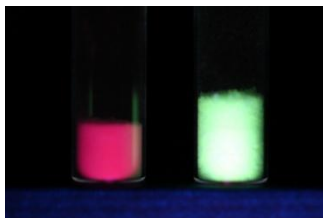
Tailoring of ligand functionalization for improved Ln(III)-centered emission in Eu(III) and Tb(III) complexes

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f-f transitions in lanthanide ions Ln(III) lead to characteristic light emission with pure and intense colors. To harness this property ligands are utilized as sensitizers.

Our group develops thiophene-derivatized ligands for Ln(III)-based precursors for luminescent polymers. We study the solid state structure and photophysical characteristics of the developed complexes and of their solutions.



	λ_{ex}/nm	λ_{em}/nm	$\Phi_x/\%$	$^3T/cm^{-1}$
Eu-ipa	299	619	0.1	26,950
Tb-ipa	301	548	3.6	
Eu-tipa	327	619	0.2	21,900
Tb-tipa	328	547	7.5	

