

**PB266- SPECTROSCOPIC PROPERTIES OF NOVEL BIS-TTA LANTHANIDE COMPLEXES**

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Novel compounds with general formula  $[\text{Ln}(\text{TTA})_2(\text{NO}_3)(\text{TPPO})_2]$  where Ln = Pr, Nd and Er, have been synthesized and characterized by elemental analyses, infrared spectroscopy and complexometric titration. Nephelauxetic effect  $\beta$  has been quantitatively used to interpret the interaction of lanthanide ions with the ligands. Spectroscopic properties of these compounds were compared with those of formula  $[\text{Ln}(\text{TTA})_3(\text{TPPO})_2]$ . The data show a more ionic character in the  $[\text{Ln}(\text{TTA})_2(\text{NO}_3)(\text{TPPO})_2]$  compounds. This result is probably due to the strong ionic interaction between the lanthanide and nitrate ions. The solid-state emission spectrum of the Pr(III) complex exhibit strong bands in the spectral range 600-650 that is assigned to the intraconfigurational 4f-4f transitions.