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Title:	pH dependent catecholase activity of Fe(II) complexes of type [Fe(L)]X ₂ [L = N-(phenyl-pyridin-2-yl-methylene)-ethane-1,2-diamine; X = ClO ₄ ⁻ (1), PF ₆ ⁻ (2)]: Role of counter anion on turnover number
Authors:	Kaur, Gurpreet (/jspui/browse?type=author&value=Kaur%2C+Gurpreet) Joshi, Mayank (/jspui/browse?type=author&value=Joshi%2C+Mayank) Choudhury, A.R. (/jspui/browse?type=author&value=Choudhury%2C+A.R.)
Keywords:	Catecholase activity Counter anion effect Fe complexes pH dependence
Issue Date:	2020
Publisher:	Elsevier S.A.
Citation:	Inorganica Chimica Acta, 513
Abstract:	Two mononuclear Fe(II) complexes having same ligand framework, coordination geometry but different counter anions [Fe(L)]X ₂ [L = N-(phenyl-pyridin-2-yl-methylene)-ethane-1,2-diamine; X = ClO ₄ ⁻ (1), PF ₆ ⁻ (2)] have been synthesized and crystallographically characterized. Both the complexes catalyzed catechol-quinone oxidation pH dependently. In the pH range 8.3–8.5 the suitable activity of both the complexes were found. Counter anions in the complexes played a significant role in controlling the turn over numbers of the catalytic reactions. In acetonitrile (MeCN), the turn over number for 1 was 4.99 h ⁻¹ and for 2, it was 42.75 h ⁻¹
Description:	Only IISER authors are available in the record.
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