



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	2014_IRJPAC_10924
Title of the Manuscript:	Synthesis, characterization and electrochemical studies on $\text{Li}_4\text{Fe}(\text{CN})_6$ as cathode material for Li-ion batteries
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments		
Minor REVISION comments	Generally, cyanides are highly toxic. Whereas, the authors state in the conclusion that the title compound is non-toxic. Please identify whether the compound is toxic. This is very important. Please check the scientific terms throughout the manuscript. Suggested revisions: 1. The title of Y axis in Fig. 3 should be transmittance instead of absorbance, according to my knowledge. 2. The figure caption of Fig.3 should be FTIR spectrum of ... since FTIR had been defined. Spectroscopy is a means. Spectrum here is accurate. 3. For the same reason, the figure caption of Fig.4 should be Powder XRD pattern of Powder here is better than powdered, in my view.	Cyanides are very toxic whereas ferrocyanide/ferricyanide is non-toxic. Because, in ferrocyanide/ferricyanide, the strong bonds between iron and cyanide ions can't be broken easily. Only, when it is treated with concentrated sulphuric acid forms toxic HCN gas, otherwise it is stable in normal condition. So, when it is entered into the living organism, the active ion is ferrocyanide $\{[\text{Fe}(\text{CN})_6]^{4-}\}$/ferricyanide $\{[\text{Fe}(\text{CN})_6]^{3-}\}$ ion not cyanide $[\text{CN}]^-$. Therefore, $\text{Li}_4\text{Fe}(\text{CN})_6$ must be non-toxic. 1. The title of Y axis in Fig. 3 changes to transmittance. 2. The caption of Fig. 3 modified to "FTIR spectra of (a) $\text{K}_4\text{Fe}(\text{CN})_6$, (b) $\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$, (c) $\text{Li}_4\text{Fe}(\text{CN})_6$ and (d) $\text{K}_3\text{Fe}(\text{CN})_6$." 3. The Fig. 4 now is Fig. 4(i) in revised manuscript. Its caption changes to Powder XRD pattern of (a) $\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$, (b) $\text{K}_4\text{Fe}(\text{CN})_6$, (c) $\text{K}_3\text{Fe}(\text{CN})_6$, (d) KClO_4, and (e) $\text{Li}_4\text{Fe}(\text{CN})_6$.
Optional/General comments		