



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)
<u>Compulsory</u> REVISION comments	I think this MS is far from a standard scientific report. The authors present the raw data without no explanation or discussion. There is no discussion in Fig2, 3, and 4. Looking at Fig.4, I wonder why the authors think that they prepare $L[Fe(CN)_6]$ compound. The data is against the authors' speculation. At least authors should determine the chemical composition of their sample by CP method or something. Looking at Fig.7, at 0.15C, there exists two/three plateaus in the charge curve. What are they? I think the data is very curious, since the charge curve is very flat at 100mAh/g. What happens if the upper voltage becomes higher than 4.4 V. Authors should experimentally answer these questions before publication in any scientific journal.	In the revised manuscript, all data have thoroughly discussed. Due to the unavailability of literature XRD data of $Li_4Fe(CN)_6$, we cannot confirmed the formation of the material from XRD, but from FTIR spectra and from the series of EDX data we confirmed the formation of $Li_4Fe(CN)_6$ (Fig. 6 & Table 1). In the charge curve, there are two/three plateaus found and this is due to removal of K^+/Li^+ from two different sites, but during discharge process, there is no much difference in insertion potential. In the upper voltage was fixed at 4.5 volt to avoid decomposition of the electrolyte. But it will be interesting to charge above 4.5 Volts.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		