

**ReviewForm3**

JournalName:	<b>Current Journal of Applied Science and Technology</b>
Manuscript Number:	<b>Ms_CJAST_123675</b>
Title of the Manuscript:	<b>IntegratingAutomationand Big Data in Lithium-IonBatteryManufacturing: A case Studyof the UltiumCells Joint Venture</b>
Type of the Article	<b>ReviewArticle</b>

**PART1: ReviewComments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correctthemanuscriptand highlight thatpart in the manuscript. It is mandatory thatauthors shouldwritehis/herfeedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part	This paper explains the rise of lithium-ion battery cell manufacturing and the importance of product improvement. Data mining technique was introduced to analyze big data for prediction of battery lifetime, performance, etc. Supporting with in-depth information on the adoption of AI can make this article more realistic for others to gain further research ideas.	
Is the title of the article suitable? (If not, please suggest an alternative title)	I suggested "Integrating Big Data in Lithium-Ion Battery Manufacturing: A case Study of the Ultium Cells Joint Venture" as the automation process was the result of big data analytic.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Problem Statement will be more interesting if the author refers to 1) the problem of traditional battery manufacturing which cannot easily scale to meet the demand for EVs, 2) the consistency and quality control of the battery cell is challenging and 3) the analysis of big data can provide real-time decision-making and long-term process improvements.	
Are subsections and structure of the manuscript appropriate?	Appropriate, however, the revision of introduction can make this paper more readable <b>1.0 Introduction</b> <ul style="list-style-type: none"> <li>- The author tried to explain many events in the Introduction. This section should be more concise, pictures are also not recommended. Please consider moving 2-5<sup>th</sup> paragraphs to the literature review section.</li> <li>- Summarize what the author will present in the rest of the paper including benefit, application and methodology shall be included in the last paragraph.</li> </ul> <b>3.2 Data Warehouse and 3.3 Data Mining</b> <ul style="list-style-type: none"> <li>- Data Sources such as sensors and production processes shall be mentioned</li> <li>- Data Mining techniques such as Prediction or Clustering shall be inferred.</li> </ul>	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required	This article can make a contribution to the EV's community such that the Ultium batteries are unique in the electric vehicle industry because the large-format, pouch-style cells can be stacked vertically or horizontally inside the battery pack. This allows engineers to optimize battery energy storage and come up with the new vehicle design and this shift will make a meaningful impact toward building a zero-emissions	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and mostly recent.	
<b>Minor</b> REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	<b>Acceptable</b>	

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<b>Optional/General</b> comments	1. Benefit of reading this articles shall be highlighted. 2. Applications of information presented shall be revealed.  SEE ATTACHMENT	
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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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