I want to participate in the APS meeting as an invited guest if possible Abstract Submitted for the APR17 Meeting of The American Physical Society

Performance of vegetative and fruits Zn/Cu based electrochemical cell¹ PROF. DR. MD. KAMRUL ALAM KHAN, Professor — We have studied the performance of PKL, Aloe Vera, Tomato and Lemon juice electrochemical Cells without load condition for 1:1 Zn/Cu based electrodes. It was studied the variation of Open circuit voltage (Voc), Short current (Isc) and Maximum Power (P_{max}) with the variation of time for PKL, Aloe Vera, Tomato and Lemon juice electrochemical Cells. It was seen from the research observation that the discharge characteristic of the PKL electrochemical cell was more efficient than the other three Aloe Vera, Tomato and Lemon juice electrochemical Cells. Because the Open circuit voltage (Voc), Short current (I_{sc}) and Maximum Power (P_{max}) are more stable and steady than the others three Aloe Vera, Tomato and Lemon juice electrochemical Cells. Furthermore, to enhance the performance we have also studied the secondary salt effect by using the NaCl as an electrolyte with the PKL, Aloe Vera and Lemon juice electrochemical Cells. Most of the results have been tabulated and graphically discussed.

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Prof. Dr. Md. Kamrul Alam Khan Professor

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