

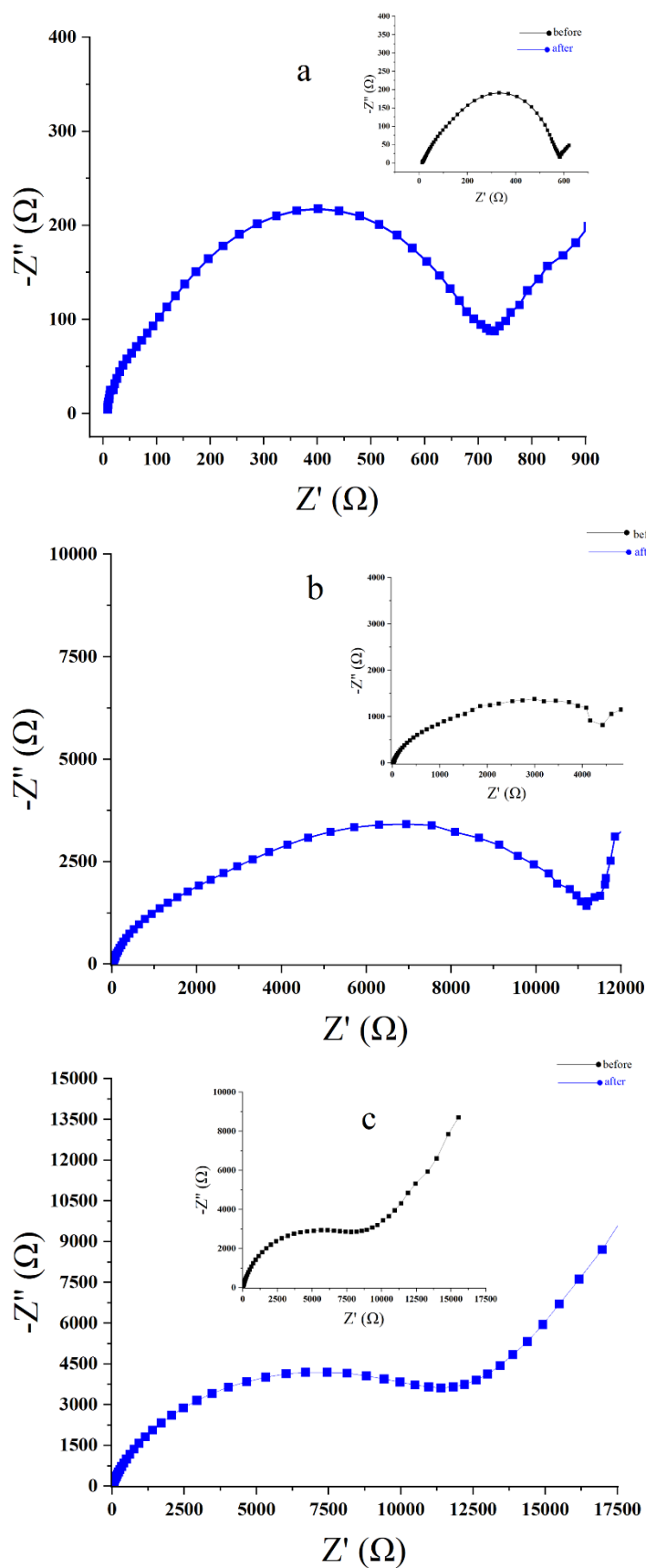
## **SUPPLEMENTARY MATERIAL**

### **THE INFLUENCE OF LOW-CONCENTRATION ADDITIVES OF DIMETHYL SULFOXIDE AND FORMAMIDE ON THE STABILITY AND PERFORMANCE OF LITHIUM BIS(TRIFLUOROMETHANESULFONYL)IMIDE-BASED ELECTROLYTE FOR LITHIUM-ION BATTERIES**

**Amjad Abdelqader<sup>1,\*</sup>, Abdo Mohammed Al-Fakih<sup>1,\*</sup>, Muhammad Amirul Aizat Mohd Abdah<sup>1</sup>,  
Rawda Maen Sunoqrot<sup>1</sup>, Muhammad Norhaffis Mustafa<sup>2</sup>, Mohamad Hamdi Zainal-Abidin<sup>1</sup>,  
Ling Shing Liau<sup>1</sup>, Madzlan Aziz<sup>1</sup>**

<sup>1</sup>*Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia,  
81310 Johor Bahru, Johor, Malaysia*

<sup>2</sup>*Sunway Centre for Electrochemical Energy and Sustainable Technology (SCEEST),  
Faculty of Engineering and Technology, Sunway University, No. 5, Jalan Universiti,  
Bandar Sunway, Subang Jaya, Selangor Darul Ehsan 47500, Malaysia  
abdelqader@graduate.utm.my, abdo-pd@utm.my*



**Fig. S1.** Nyquist plots before and after polarization during chronoamperometry measurements for a) blank electrolyte, b) 2.5 wt% DMSO, and c) 2.5 wt% FA.