

**Recovery of Cobalt as CoS from Spent Li-ion Batteries and Investigation of Its Use
as Electrode Material of Supercapacitor**

Sezgin YASA^{1,2}, Burak BİROL¹, Metin GENÇTEN^{1*}

¹ Yildiz Technical University, Faculty of Chemical and Metallurgical Engineering, Department of Metallurgy and Materials Engineering, 34210 Istanbul, Turkey

² Cankırı Karatekin University, Faculty of Engineering, Department of Mechanical Engineering, Cankırı, Turkey

(Supplementary Document)

***Corresponding author:** Assoc. Prof. Dr. Metin GENÇTEN
Department of Metallurgy and Materials Engineering,
Faculty of Chemical and Metallurgical Engineering,
Yildiz Technical University, 34210 Istanbul, Turkey
E-mail: mgencten27@gmail.com

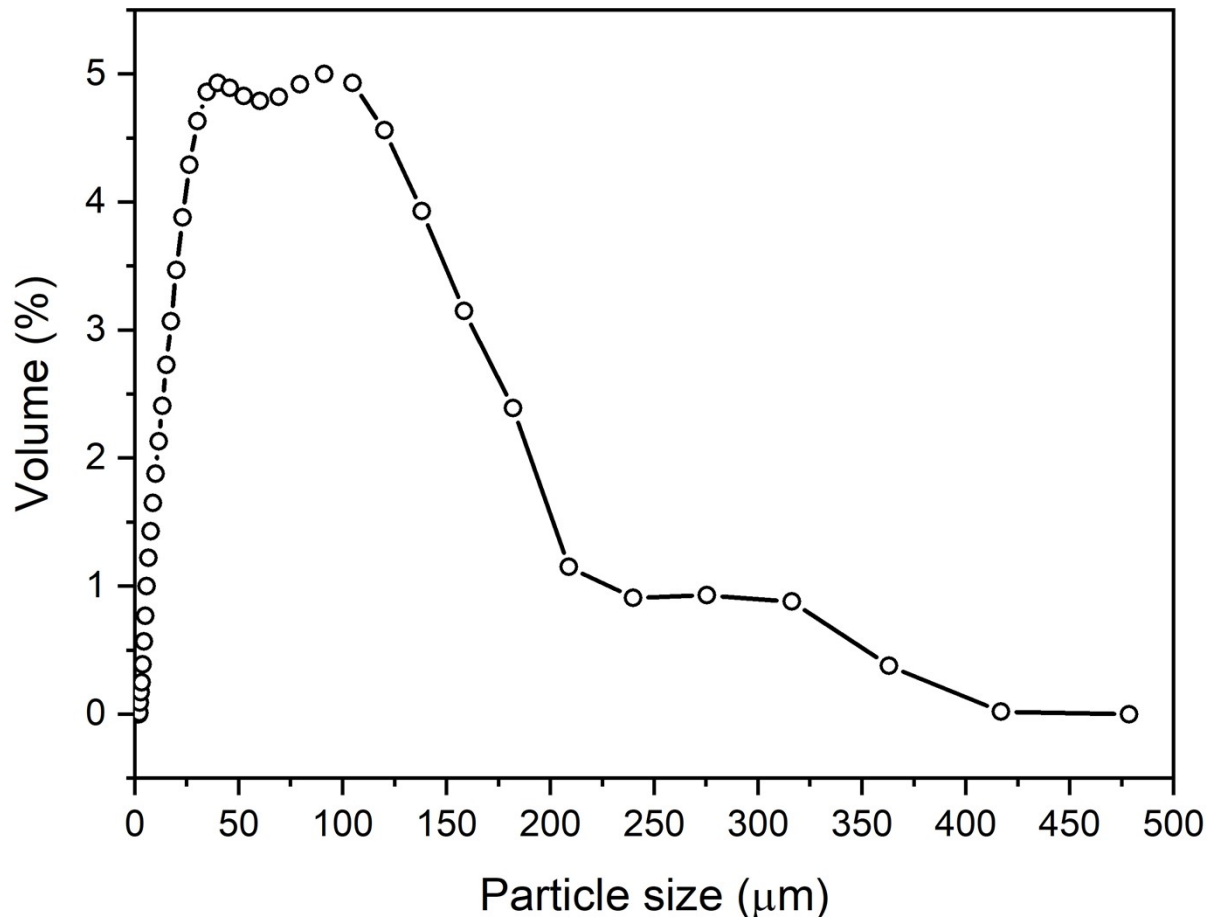


Figure S1. Grain size distribution of ground CoS powder

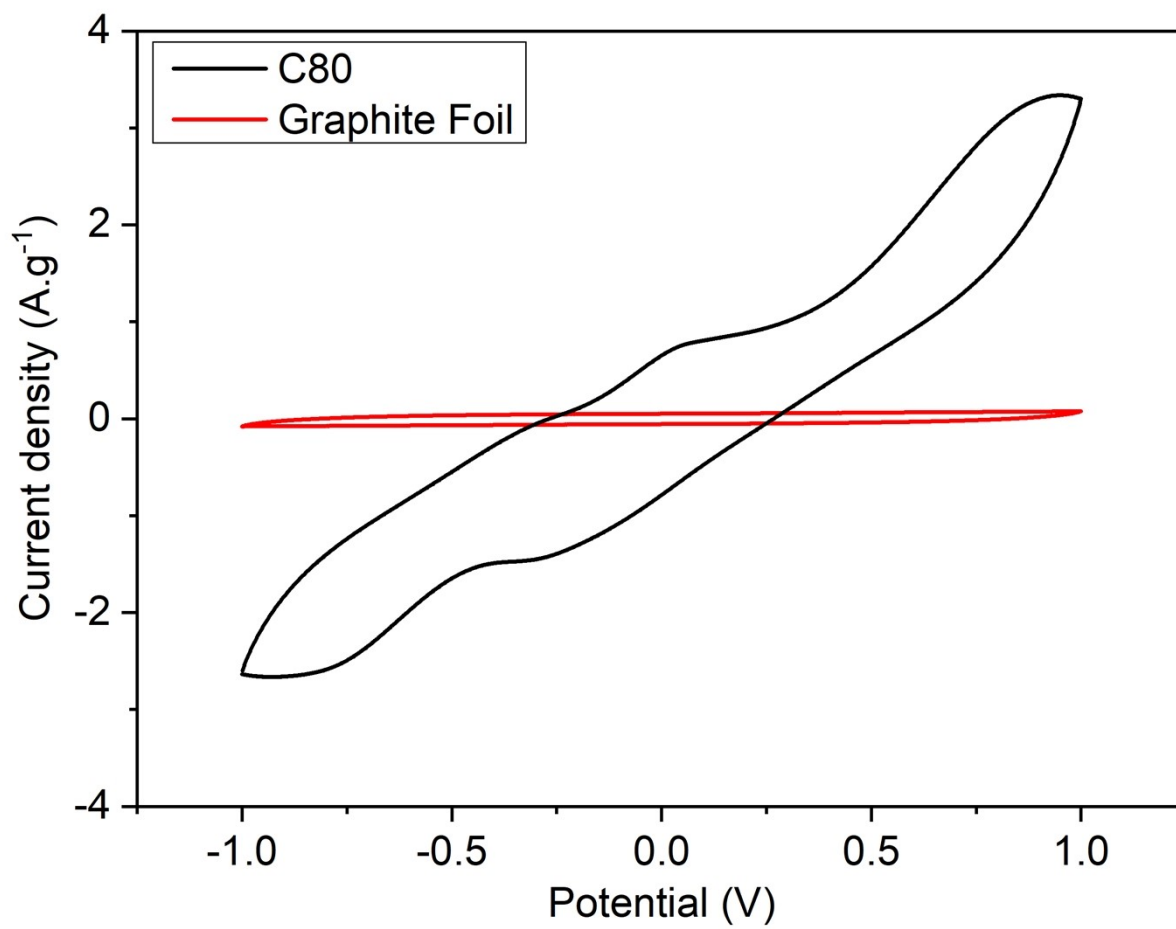


Figure S2 Comparison of cyclic voltammograms of C80 and graphite foil including supercapacitors at 50 mV s^{-1} .

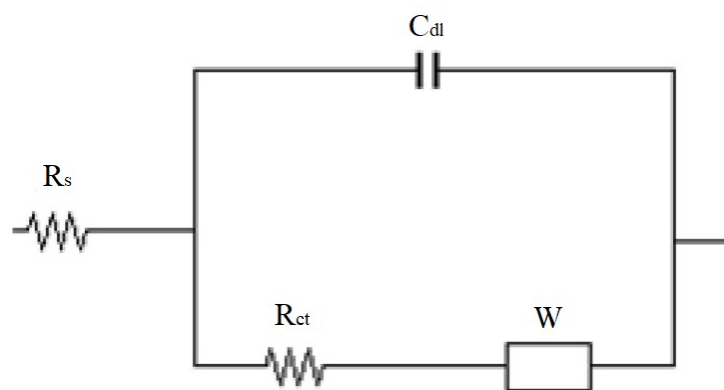


Figure S3 Used equivalent circuit model for fitting of EIS spectra