

Preparation of an electrochemically reduced graphite oxide(RGO) electrode of VRFBs.

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Carbon based electrode is made good using in electrochemical energy storage systems. Especially, graphene electrode in vanadium redox flow batteries (VRFBs) have attracted increasing interest, because electrode has a key role to play in VRFBs by providing sites for the electrochemical reactions in VRFBs. Graphene materials were prepared from a graphite, by means of oxidation/exfoliation/reduction. The oxidation of graphite was carried out by modified Hummer method. The exfoliation of graphite oxide was carried out by ultrasonicator and the reduction was carried out by the thermal at 1000°C. So reduced graphite oxide(RGO) gained by this process. RGO was investigated in terms of physical and electrochemical aspects.