

## Electronic Supplementary Information

### **Methylene blue incorporated mesoporous silica microspheres based sensing scaffold for the selective voltammetric determination of riboflavin**

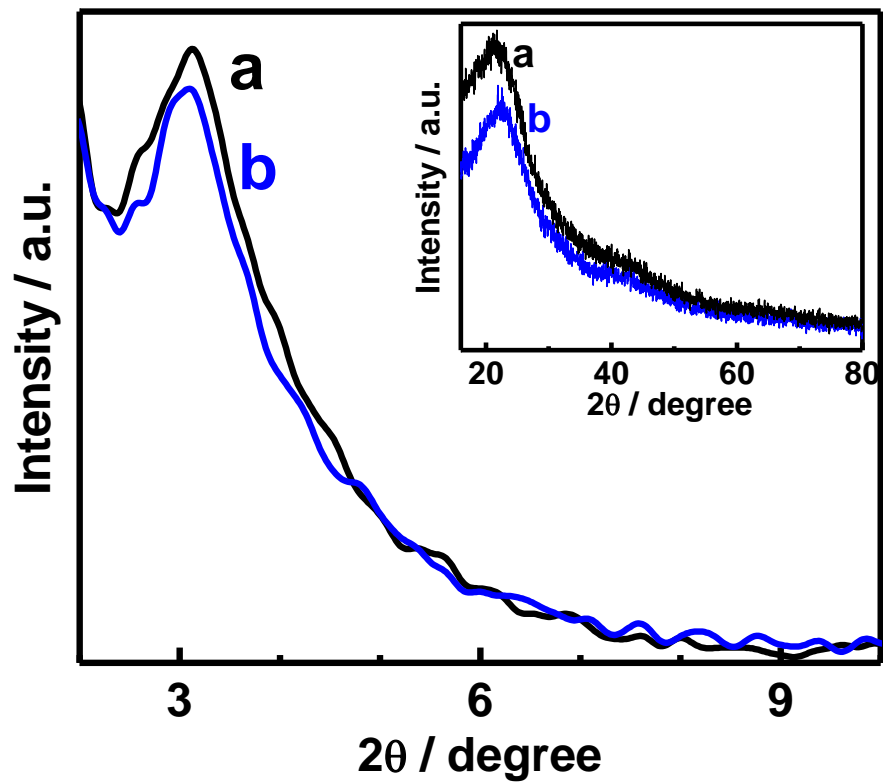
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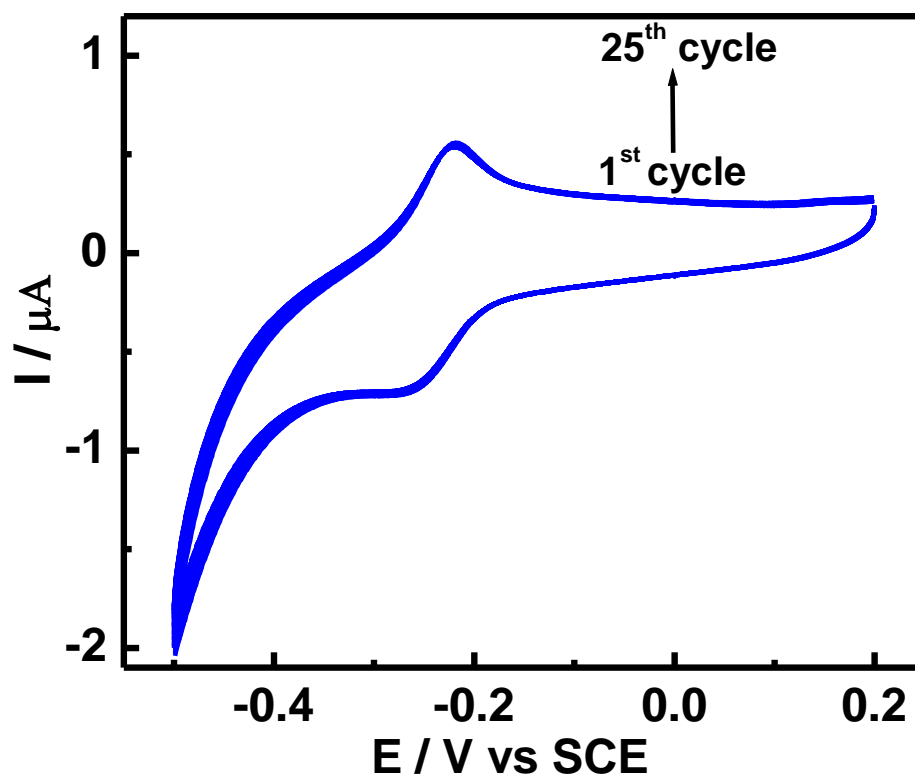
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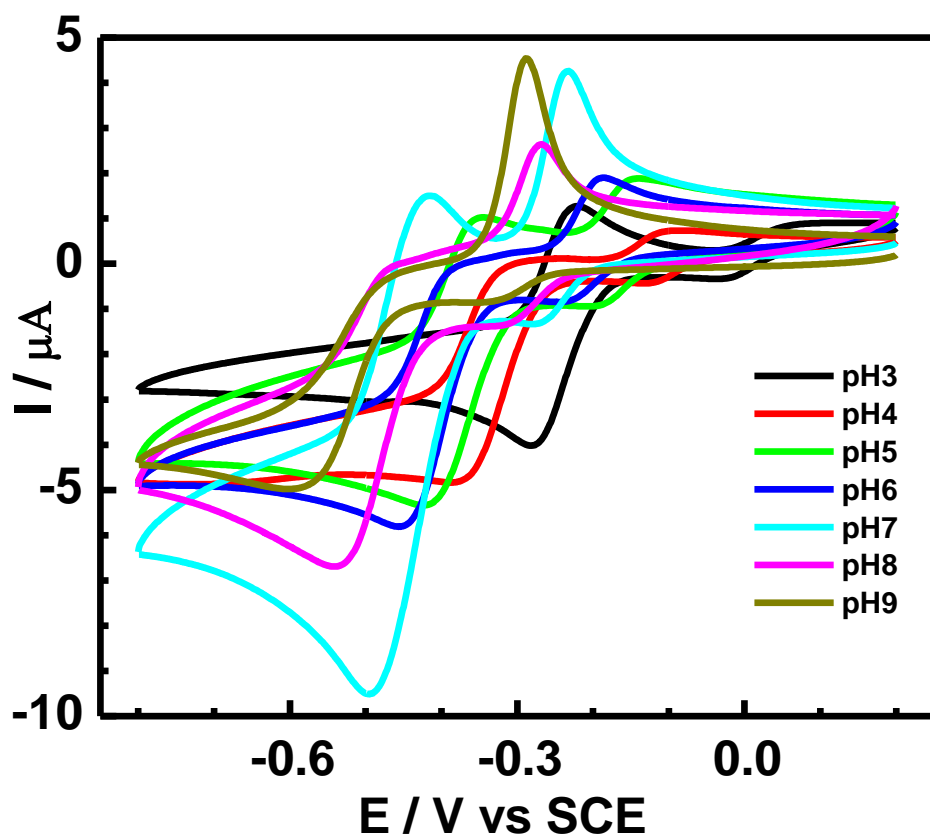
E-mail: [velganesh@yahoo.com](mailto:velganesh@yahoo.com) and [velgan@bhu.ac.in](mailto:velgan@bhu.ac.in)



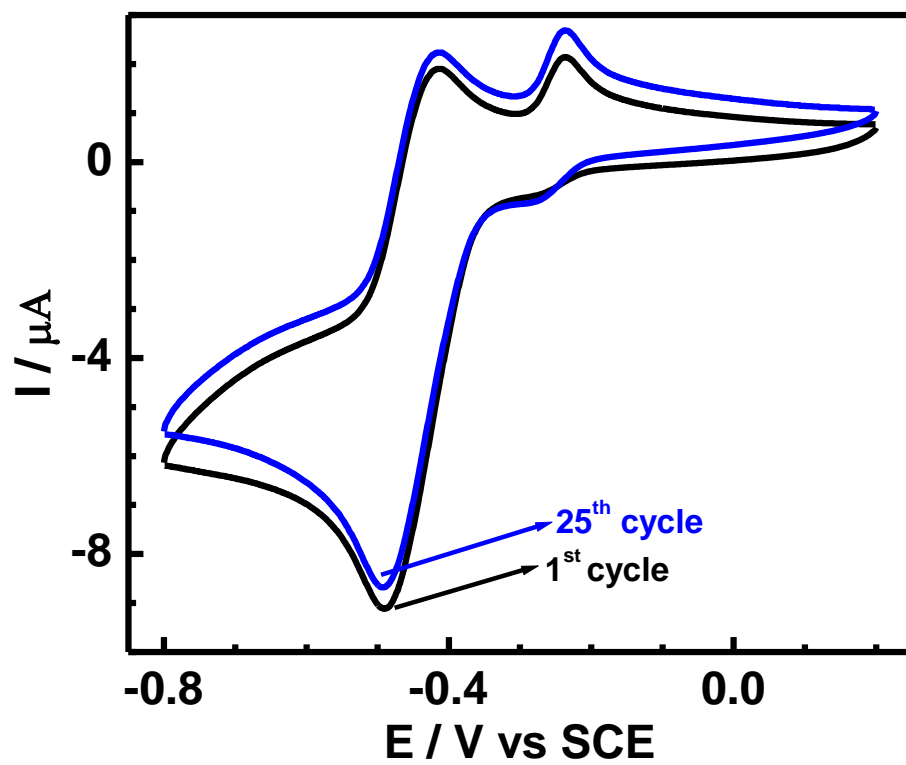
**Fig. S1.** Small angle XRD patterns of (a) SO<sub>3</sub>H-MSM and (b) MB-SO<sub>3</sub>H-MSM; inset shows the wide angle XRD patterns of corresponding materials.



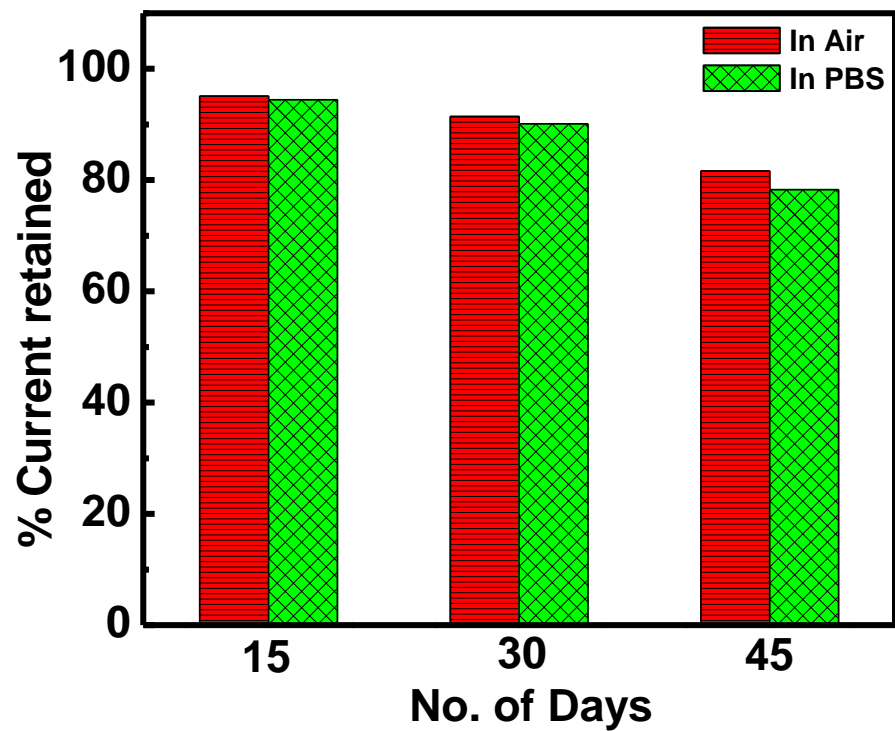
**Fig. S2.** CV of GC/MB-SO<sub>3</sub>H-MSM for 25 consecutive cycles.



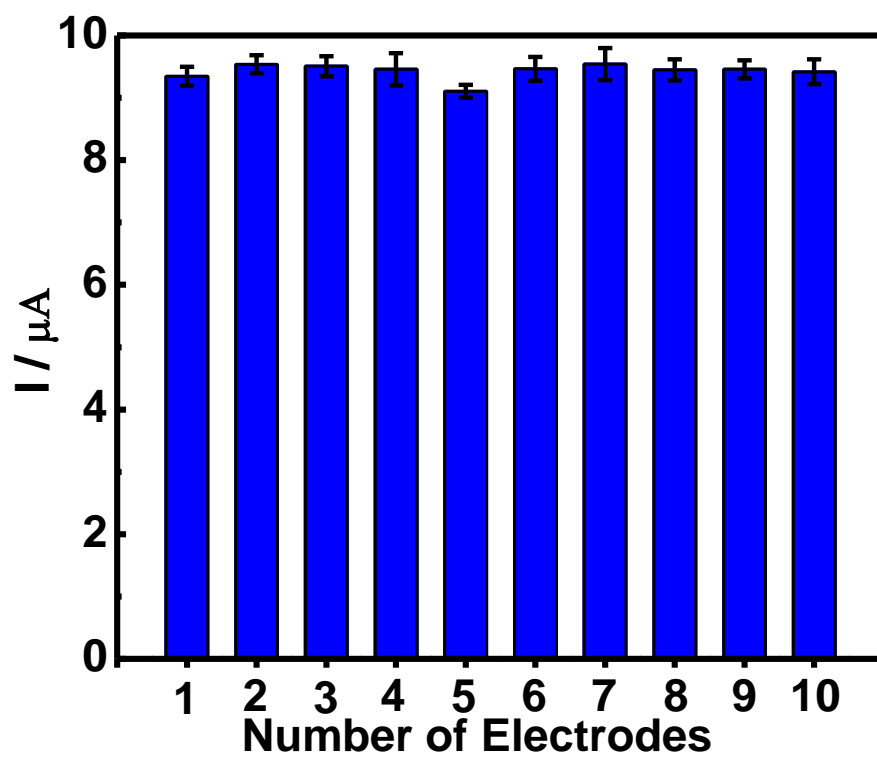
**Fig. S3.** CV curves of 0.5 mM RF at GC/MB-SO<sub>3</sub>H-MSM in PBS solution of pH 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0.



**Fig. S4.** CV responses of GC/MB-SO<sub>3</sub>H-MSM for reduction of 0.5 mM RF in 0.1M pH 7.0 PBS, first and after 25 continuous cycle.



**Fig. S5.** Storage stability response of GC/MB-SO<sub>3</sub>H-MSM for reduction of 0.5 mM RF after storage for 15, 30 and 45 days in air and PBS (pH 7.0) respectively.



**Fig. S6.** Current response of 0.5 mM RF at ten different GC/MB-SO<sub>3</sub>H-MSM in 0.1M pH 7.0 PBS.